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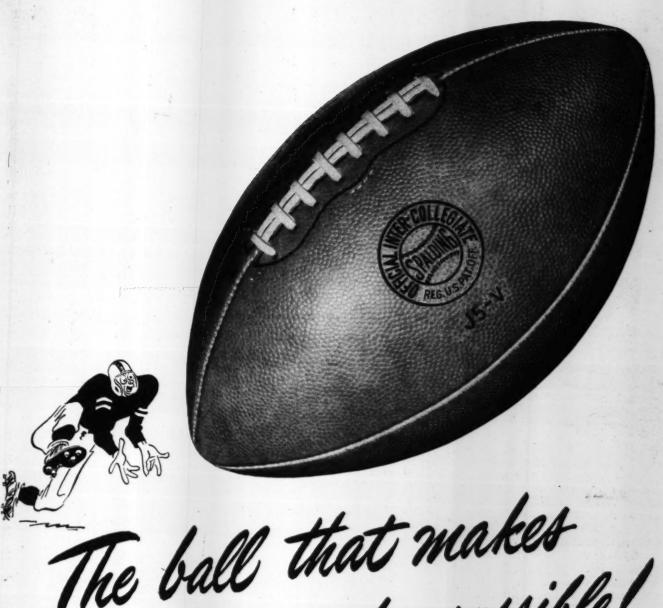
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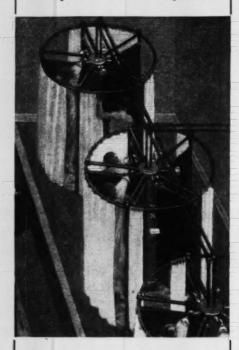
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## SCHOLASTIC

VOLUME 17

NUMBER 8

APRIL

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## A Joint Football Code for Schools and Colleges

THE "impossible" has happened! After 16 years of widely divergent views on the football rules, the National Collegiate Athletic Association and the National Federation of State High School Athletic Associations have joined forces in the production of a common football code to govern all amateur football.

This new code represents months of intensive study and many conferences between representatives of the nation's two major school organizations. The committee which drew it up received valuable contributions from the two national rules committees and other football leaders.

The new code, which both high schools and colleges will play under, will go into effect next season. It is an entire recodification, built as a unit and incorporating the best features of both the Collegiate and the Federation codes. While different from either, it bears enough resemblance to both to permit any student of the rules to "feel among friends" when studying it.

#### FEATURES OF THE CODE

The differences between the former Collegiate and Federation rules have been reduced from approximately 150 to about a dozen. The new code contains no supplemental notes. Whenever necessary, the essential material which was once included in scattered notes has been incorporated in its proper rule. The rules statements (football laws) are organized on the basis of rule, section, and article. There are no items; hence reference numbers are in either two or three digits.

In general, the provisions are in complete statements or paragraphs, each of which is a correct unit. This has been done even though it has sometimes resulted in the repetition of certain introductory phrases.

There are very few cross-references,

and these few refer merely to a preceding or following paragraph. Practically all exceptions have been eliminated. The only places where it has been necessary to make indirect reference to an exception are in the cases where the game itself engenders an odd set of conditions contrary to game fundamentals.

The new code is based on a few fundamental game principles. In this respect, it resembles a science code which is built on a few natural laws, or a code in geometry or algebra which is based on a few fundamental axioms or mathematical principles.

#### TYPICAL RULES PROVISIONS

For purposes of illustration, here are a few of the axioms on which the football code is built.

During a down, the ball is always alive. A live ball is always in possession of one team or the other. When a team is in possession, the ball is either being held by a player (player possession) or else it is loose (as in pass, kick, or fumble)

The game is made up of a series of downs separated by a dead-ball period. The two primary penalties for a foul are loss of 5 yards or loss of 15 yards. A pass—backward or forward—is merely a type of loose ball and the general loose-ball rules apply.

Whenever the ball becomes dead behind a goal line, it is either a touchdown, try-for-point, field goal, safety, or a touchback. Penalties are enforced by the "3 and 1" method of enforcement. Penalty enforcement provisions are condensed into a few paragraphs in Rule 10.

Here are a few of the provisions which are included in the new code and which will be in effect next season.

1. An artificial tee will be permitted

By H. V. PORTER

during any place-kick (any free-kick, try for field goal, or try for point).

2. When a scrimmage-kick touches something behind the receiver's goal line, the ball will become dead immediately, regardless of whether it has been touched in the field of play.

3. If a first free-kick is out of bounds, it will be kicked again. If the second such kick is out of bounds, the ball will be awarded to the receivers on their free-kick line (usually the 50-yard line if the kick-off is out of bounds).

4. Penalty for any infraction of the substitution rule will be loss of 5 yards.

5. If any foul, such as encroachment or delay of game, occurs near the time of the snap, the referee will be authorized to blow his whistle to kill the ball only when the infraction occurs early enough to give the referee a reasonable chance to prevent the snap. If the infraction is too late for this, the referee will withhold his whistle and allow the play to go through.

6. Teams will be permitted 25 seconds to huddle and put the ball into

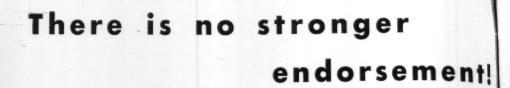
7. Penalties will be enforced in accordance with the "3 and 1" method of enforcement.

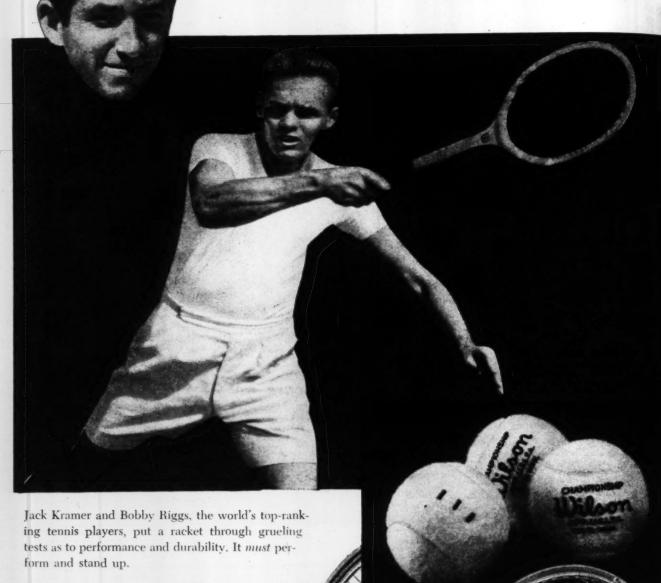
8. There will be no restriction to prohibit a center, guard, or tackle from changing positions with a backfield player during any down. When such a lineman takes a position one yard or more behind the line, he becomes a back with all the privileges of any other back.

9. Handing the ball forward will not be considered a forward pass. In a pass, the ball must actually leave the hand of the passer and travel in flight. When the ball is merely handed to a teammate, it is legal in certain situations behind the line. When illegal, it will carry a penalty of loss of 5 yards.

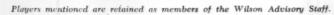
10. If a forward pass touches an in-

(Concluded on page 42)





These champions have used Wilson rackets exclusively since their earliest amateur days . . . and still do. Don Budge, Alice Marble, Pauline Betz and Mary Hardwick also use and recommend Wilson. There is no stronger endorsement than this . . . no better basis upon which to choose and specify tennis equipment. Wilson "Strata-Bow" rackets and "Championship" balls will provide your tennis program with the finest.



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THE LAST WORD
IN SPORTS EQUIPMENT

## The Steele Spring

By CLAUDE T. BURNS

MERICA'S—and probably the world's—premier broad jumper is fleet, pantherish Willie Steele, a 5-foot 11-inch 160 pounder from San Diego State College. At Salt Lake City on June 20, 1947, Willie leaped 26 ft. 6 in., only 2½ in. off Jesse Owens' world mark. Steele's average in triangular and relay meets last year was about 25 feet; in dual meets, it was somewhat less.

At Hoover High School (Calif.), Willie specialized in the broad jump, low hurdles, and high jump. Today, as a collegian, he runs the 100 and 220, in addition to broad jumping. His best competitive sprint times have been 9.7 for the 100 and 21.4 for the 220.

That means he has speed to burn plus spring, a perfect combination for the broad jump. As a rule, Willie never extends himself unnecessarily or tries to break a record. He only tries to win.

This season, however, he has his sights set on the world record. He feels he can best accomplish this by prolonging his peak until past mid-season, then going all-out in the big meets.

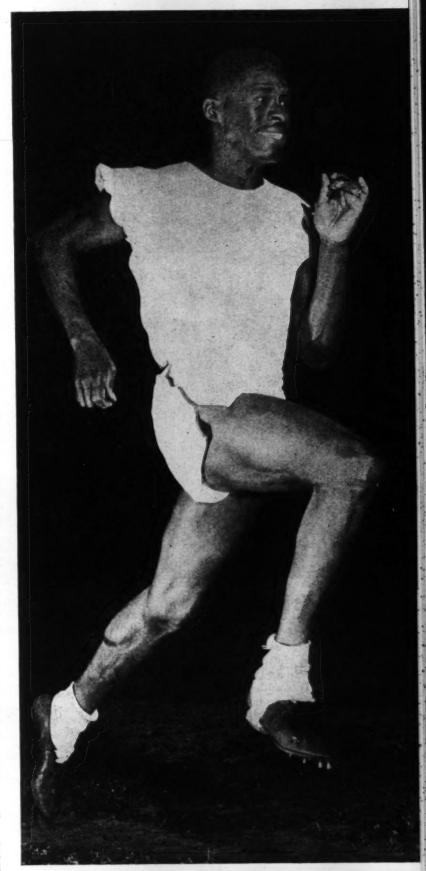
Steele's form is graphically illustrated in the pictures on this and the following pages. The jump was a legitimate effort at top speed, since the athlete himself wanted a true picture of what he actually did.

The picture on this page shows the stride preceding the spring. This stride is cut to about three-fourths of normal, and follows a stride that has been cut to about seven-eighths of normal.

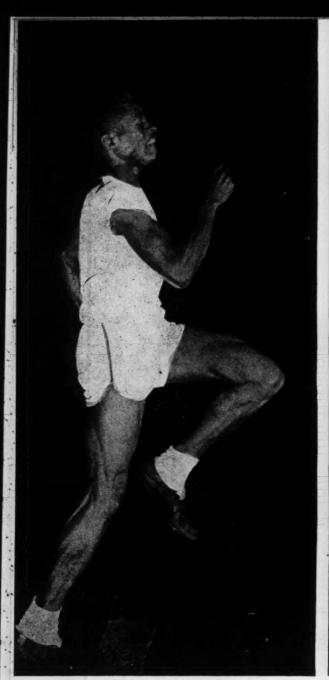
The last stride is not as short as the illustration might lead one to believe. The right leg has started the downward drive for the board, but Steele's terrific forward body momentum will place the foot considerably ahead of where the stopped motion indicates it will land.

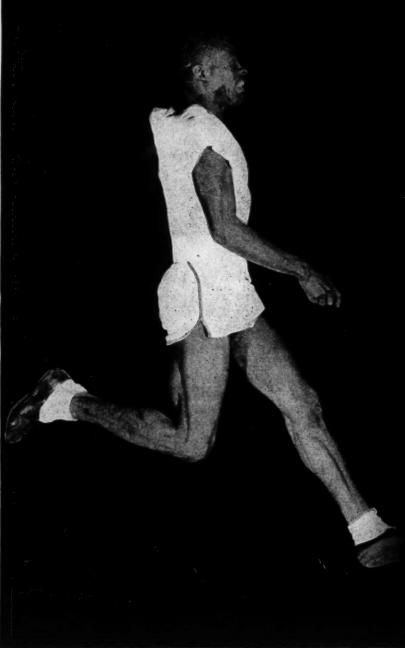
Steele has standardized on a run of 157 feet, which is enough to develop full sprint stride. Under normal conditions, this will place his right foot on the board at the right spot. Correct sprinting form is maintained up to the take-off. Note the synchronized arm and leg action, high knee lift, and forward lean.

The actual jump appears on the next two pages.



The Stride Preceding the Spring





#### No. 1, Take-Off

Muscular stress in the take-off leg is clearly indicated. There apparently is a definite forward lean even in the stationary position. But not as much as the picture would indicate. The athlete's terriffic forward momentum has exaggerated it for the camera.

Steele springs powerfully from the take-off leg at great speed; there is no deceleration of the forward momentum. The knee lift is simply a continuation of sprinting form, but is somewhat exaggerated and in coordination with the spring. The object is to maintain maximum height without any loss of speed.

#### No. 2, Primary Stage

The first of a series of violent body movements designed to maintain forward momentum and prolong the descent to the pit as long as possible. The left leg (take-off foot), has not been lowered. Rather, the body has traveled upward and the knee has straightened naturally in a split-second of relaxation.

The right leg is cocked for a terrific kick which will accentuate the now upward as well as forward movement.

#### No. 3, Peak of Jump

As this kick is completed, the maximum body height is reached. Although Steele clears about four feet, he makes no effort to high jump or hurdle. It is the height of the center of gravity that counts.

The left foot, which has lagged far behind, is now cocked for a forward and upward kick which will add still more to the momentum prolonging the descent and increasing forward distance.

#### No. 4, The Descent

Both legs come forward in the long reach for every possible inch of forward distance. Both arms are thrown forward into an upper body forward-lean balance which will minimize the danger of falling back.

The right leg will be stiffened at the moment of contact, but only for an instant and will be accompanied by a strong body lean to the right. Both legs will then relax to permit the body momentum to carry the upper and middle body in front of and to the side of the feet, thus effectively preventing any loss of distance.

#### **Daily Routine**

Oddly enough, Willie does not practice broad jumping. He believes his regular sprint training and his dual-meet jumps furnish sufficient preparation.





After several weeks of conditioning (which he started on February 9), he will work on sprinting form. He feels that the technique of his jump is satisfactory; that his best chance for the world record lies in increasing the speed of his approach, especially as he hits the

Steele observes a five-day-a-week training schedule. His conditioning procedure is limited to jogging and standard calisthenics. He works out about an hour and a half every afternoon of the five school days, and will follow this routine until the dual meets come around.

He does not wish to reach his peak quickly and then attempt to prolong it unduly. As stated before, he wishes to hit his peak ability and form as the big meets begin; then try for a world record.

This safe-and-sane attitude characterizes all his training.

#### **Photographic Details**

These shots, unfortunately, were taken on a cold, damp evening so that the lens and range-finder were continually coated with moisture. The writer (who took the pictures) would have liked to have made some re-takes, but did not do so out of consideration for the athlete who had thoroughly warmed up for a supreme effort on a drier field some miles distant.

Lighting: One flash cross-body upwards from left and behind jumper; one similar from above and front; one flash straight ahead from center. Three 1/10,000 sec. strobo flashes for each movement.

Cameras and camera angles: Speed graphic 4 x 5 to side and slightly in front of take-off board, for approach and spring. Five-by-seven view camera focused directly to center of pit. Graflex 4 x 5 about six feet beyond end of pit and facing board. 15 cm

Zeiss Tessar lens in Speed Graphic; Goertz Dagor 7 in. lens in view camera; 14 in. Turner Reich Convertable Graflex. Speed Graphic controls all flashes; view camera and Graflex on bulb and secured on tripods. Speed Graphic used as news camera, compour shutter at 1/100.

Film and Development: Isopan at f 11. Developed 40 min. at 65° F. in Glycin. Formula: Sodium sulfite, 100 g; sodium carbonate 250 g; glycin 50

g, in two gal. water.

Paper and Development of Prints: Graphic and Graflex negatives on Brovira No. 3; view 5 x 7 negatives on Kodabromide N 4. Film developer: Metol 15 g; glycin 40 g; hydroquinone 40 g. Object of development was correct skin tone and surface detail with adequate contrast.

This remarkable set of photos and the complementing story are the handiwork of Claude T. Burns, a former collegiate all-round athlete who is now a photography instructor in the San Diego (Calif.) City Schools.

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### **Tennis Training**

ECOGNIZING the enjoyment and physical benefits derived from tennis during and after school years, three Chicago agencies -the Board of Education (Dept. of Physical Education), the Public Park Tennis Assn., and the Chicago Tennis Assn. - have developed jointly a comprehensive tennis training program for elementary and secondary schools.

Tennis, unlike many sports, of-

fers enjoyment and good exercise to all regardless of physical prowess, and provides a broader base for physical training activities in the school program.

While competitive play is an important feature of a school tennis program, it alone does not provide satisfactory results. Most boys and girls are not ready to start playing immediately and must, therefore, be provided with an elementary knowledge of the primary strokes, footwork, and a system of organized practice.

The Chicago training program is

hence centered around a series of standardized tests designed to serve as goals and to provide incentives to reach those goals through organized practice. Pre-tests are recommended to determine when the student is ready for a prescribed course on fundamentals, thus saving time and energy in promoting the development of basic techniques.

Students completing the practice tests and examinations satisfactorily, and who are recommended by their instructor, receive certificates of merit from the Chicago Tennis

#### TESTS FOR BRONZE CERTIFICATE

#### Part I-Forehand Test

- (a) Bounce and hit 25 consecutive balls over net from baseline.
- Bounce and hit 25 consecutive balls cross-court. (b)
- (c) Bounce and hit 15 consecutive lobs.

#### Part II-Service Test

- (a) Hit 20 out of 25 balls into right service court.
- (b) Hit 20 out of 25 balls into left service court.

#### Part III-Oral Test

- (a) Scoring (b) Court Etiquette
- (c) Rules and Terminology

#### TESTS FOR SILVER CERTIFICATE

#### Part I-Forehand Test

- Bounce and hit ball over net between sidelines 25 out of 30 times.
- Bounce and hit ball from forehand corner to cross-court corner 25 out of 30 times
- (c) Bounce and hit 25 out of 30 balls over net to backhand corner.

#### Part II-Backhand and Lob Test

- (a) Bounce and hit ball over net between sidelines 25 out of 30 times.
- (b) Bounce and hit 25 out of 30 good lobs to opponent's backhand.
- Bounce and hit 25 out of 30 good backhand drives to opponent's cross-court corner.

#### Part III-Volleys and Overheads

- Demonstrate, by hitting with instructor, the ability to volley and half
- Demonstrate, by hitting with instructor, the ability to hit over heads.

#### TESTS FOR GOLD CERTIFICATE

An average of 60% is required for all the 12 strokes listed below. 50 balls will be hit on each of the 12 strokes. An instructor, or someone appointed by him, can feed the balls for the tests.

- 1. Forehand down the line
- 2. Forehand cross-court long
- 3. Forehand cross-court short
- 4. Backhand down the line
- 5. Backhand cross-court long
- 7. Forehand lob
- 8. Backhand lob
- 9. Forehand drop shot
- 10. Backhand drop shot
- 11. Service to right court 12. Service to left court
- 6. Backhand cross-court short

(No. Made-No. Missed-Percentage)

#### ELEMENTARY TENNIS PROGRAM

#### Requirements

No tennis rackets are required for this course.

Two or three dozen odd tennis balls, depending upon the size of the

Space Any size gym will suit the requirements of this course.

#### Suggested lead-up exercises

- 1. Knee bending. (Leading up to the crouch necessary for low bouncing balls.
- 2. Lunging. (Probably the greatest weakness of most players-the inability to sustain the weight over the front knee long enough to complete the stroke.)
- 3. Back bending. (Very vital later on in executing the advanced serv-
- 4. Skipping sidewards. (Gliding or drifting into position.)
- 5. Running backwards and for-
- 6. Squeezing a tennis ball and relaxing. (Development of forearm and wrist.)
- 7. Holding two balls-first ball by heel of hand and the last two fingers; the second ball resting on top of first ball and held by the thumb and first two fingers.
- 8. Tossing the ball with the left hand and catching it, (Leading up to the service.)
- 9. Underhand tossing of ball to partner: (a) Tossing ball in front of partner so that he can catch it on bounce with both hands; (b) Tossing ball to right of partner so that

(Continued on page 61)



RAY LAMANNO, Cincinnati Reds, wearing new MacGregor Goldsmith No. 238 Mask

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... Not Just Another Bar Mask!

... Not Just Another Magnesium Mask!

MacGregor GoldSmith

#### No. 285 MAGNESIUM MASK

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... an entirely new design for a new material, approximately 30% lighter than high grade wire masks. Allows perfect vision. Extended chin lets face move into the mask allowing better side to side vision while providing greater protection. Angular broken line chin reduces possibility of direct flat blows. Extended frame allows for additional padding at chin. Patent applied for.



SIDE VIEW



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"Scores in Every Field of Sport

## Base Running

By ETHAN ALLEN

OW often have you seen a runner put out on a play on which he should have been safe by a mile, simply because he failed to hustle? Hustle is the key to base running. Combined with quick thinking, it is the essence of all action on the bases.

There are several factors in base running which require only common sense. One is running down the line to first base. The main idea on a straight run is to keep in the three-foot lane.

This is particularly true if the throw is made from near the plate. Otherwise, the umpire may declare the runner out for interference.

If there is a chance of advancing on the play, the runner should bear slightly to the right away from the base line so that he can approach the bag in good position to continue on. A slight body lean toward the base line will aid in the execution of the turn.

A smart runner will not watch the ball until he reaches the bag. He will then locate the ball and determine whether or not he can continue to second—unless, of course, he knows he can take at least two bases on the hit or the coach gives him the advance sign.

Four principles should always guide his action: (1) his ability as a runner; (2) the throwing ability of the fielder; (3) the situation—score, outs, stage of the game; and (4) the ability of the next batter.

Once he reaches first base, the runner should remain on the bag until the pitcher takes his position on the rubber. This is the best safeguard against hidden-ball plays, since the pitcher must have the ball once he steps on the rubber. Failure to have the ball constitutes a balk.

While standing on the bag, the runner should look toward the coach for a steal sign.

He is now ready to take his lead. As the pitcher assumes his position, the runner should make a gradual movement away from the base, first taking a cross-over step with the No Scholastic Coach baseball season is complete without a four-base literary effort from Ethan Allen, former big league star now coaching at Yale U. A prolific author (three books), game manufacturer, and font of knowledge, Allen has copped the Eastern Intercollegiate Association title two years running.

left foot and then bringing the other foot up. To increase the lead, the runner may take a sideward step with the right foot, then bring the other foot up so that both feet are fairly close together.

Since the legs are never crossed in the latter action, this permits the runner to return quickly to the bag.

Now for the stance. The best position is a crouch with the legs comfortably spread (about 18 inches apart), the feet parallel and at right angles to the base line, the hands on the knees, and the weight over the balls of the feet.

In starting for second, the runner should pivot on the right foot and step with the left foot. The reverse is true in returning to the base—pivot on the left, step with the right.

In advancing to second, the runner should never interfere with a man fielding the ball. It is always advisable to run behind the fielder. For the same reason, it is wise to lead off behind any fielder who takes a position in the base line.

Short fly balls. With less than two out, the runner should advance to



The Lead-off Stance

a position between the bases from which he can return safely if the ball is caught. Runners on third base may tag up if an infielder is likely to make the catch running toward the outfield.

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A smart runner will stand in the regular base-running stance and face the player attempting the catch. He can thus quickly return or advance.

Long fly balls. Runners on second and third should tag up. This also holds true of a man on first if he is fast and the ball is easy to catch. If the catch is doubtful, however, he should make his play just as on a short fly.

In tagging up, the runner should face the side of the field on which the ball is hit, placing the toe of one foot on the inside edge of the bag. He should assume a slight crouch with the legs comfortably spread about 18 inches apart and the feet pointing in the direction of the intended run.

As the ball nears the fielder, the weight should be transferred to the front foot so that the start may be made from this foot rather than the back one. This saves a full step.

It should be remembered that bases are stolen on the pitcher more often than on the catcher. It is hence extremely important to study the action of the pitcher when taking a lead.

Flagrant weaknesses that will aid a runner in obtaining a quick start include: Body lean forward at the start of the pitch, high or excessive leg action, delayed arm action, and excessive trunk turn toward first in watching the runner so that the pitch is started with the front shoulder pointing toward the base instead of the plate.

Many high school runners have no clear conception of their play when perched on second with less than two out. A good fundamental rule for this situation (runner on second, less than two out) follows:

(1) If the ball is grounded to the right side of the infield, advance to third. The first or second baseman will rarely make the play to third.

(2) If the ball is hit to the left side (to the third baseman or short-stop), remain at second until you see the ball go through.

Another tough situation for schoolboy runners is that with first and third occupied and none out. On ground balls, the man on third should always go in. The idea is to break up the possible double play.

If the play is to the plate and the runner coming in sees he has no chance of scoring, he should hang up between the bases, running up and down so that the man on first can advance to third and the hitter can reach second.

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I'm not going to discuss the art of sliding. That is an article in itself. I will, however, touch on the important art of breaking up a double play.

The idea here is to contact the pivot man and thereby interfere with the throw. The best way this can be done is to get a good jump off first base and head directly for the thrower.

The runner may roll into the man or slide into him with spikes high. It is not essential to hit him hard and possibly injure him. All that is needed is to unbalance him enough to prevent an accurate throw. This may be done by contacting his stepping foot with the instep of the nearest foot.

Common sense on the base lines is the best counter against quick-thinking defensive men. For instance, a runner should never leave a base after a slide or after what may be a foul ball, until the umpire notifies him to return to the previously occupied base.

Head's-up infielders are always deliberately yelling "Foul ball!" to fool unwary base runners.

The same holds true for routine fly balls not covered by the infield-fly rule. Some defensive players will deliberately drop such flies to confuse the runners. It should be remembered that a fly ball cannot be purposely dropped. The batter is immediately out. But this does not prevent runners from straying off base and falling into the preplanned trap. Runners can, of course, advance at their own risk, the same as on a dropped "infield fly."

The infield-fly rule is confusing to most runners, even though actually it is very simple. It is merely a ruling to prevent synthetic double plays and applies only to situations wherein first and second or all the

(Concluded on page 49)

#### BENT-LEG SLIDE

(George Stirnweiss, N. Y. Yankees)

The safest, most effective slide in the book, the bent-leg permits two approaches to the bag and enables the runner to rise quickly after reaching it. The slide is executed by throwing the weight toward the bag with one leg in a slightly flexed position and the other leg bent under. The take-off is always with the bent-under leg, which receives the full impact of the slide. By keeping the extended member in the air until the bag is reached the runner prevents his spikes from catching in the ground and can use this foot to interfere with the step of a baseman who is attempting to complete a double play.











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## Five Star Track

By LILLARD M. AILOR

RACK and field has been considered an art and a science since the first Greek "Games of Olympia" back in 1453 B.C. The light of scientific investigation is constantly being focused on training and instructional methods, offering the athletes new weapons with which to attack the existing records.

One of the latest scientific approaches to the problem of training is the Five Star program developed by John T. Core, of Richmond, Va.

Core, a former college track star and coach, now a member of the national Track and Field Committee of the A.A.U., has been a student of the sport for more than 30 years. Several seasons ago he decided to do something about the "also rans" of the track teams. The result was his Five Star individual track scoring cards.

Core chose the five basic events—high jump, broad jump, shot put, 100-yards dash, and 880-yards run—and scaled each event from 1 to 100 points so that any individual performance could be transposed into a point score.

Core gave his squad a Five Star field day at the start of the season and again at the end of the season. In that way he could note the progress of each individual in the five basic events, and could give each track student a black-and-white record of his improvement.

After his first experimental use of the program, Core made a useful and startling discovery. He found that some of the boys who had been specializing in one event displayed more natural ability in another.

He came to the conclusion that many coaches were failing to place their new boys in the proper event because they could not determine whether a starting performance of, say, 11.3 in the 100 was better than a high jump of, say, 4-11.

It followed that, if the coach could accurately transpose performances into point scores and check with validated averages, his job would be much easier and much more successful. Enter Five Star.

Five Star has come up with many astonishing case histories. Last year it made a Virginia 880 champion

out of a non-point gathering high jumper of the previous season.

Because he was tall and lanky, the boy had been persuaded to go out for the high jump. He tried the event through the 1946 season with little success. Then the Five Star program was run off, and the boy negotiated the 880 in 2:16.6.

He switched to this event last year and the move paid off in points, a championship, and a track letter. On February 28 at the Chapel Hill (N.C.) Carolina Relays, he bettered the scholastic 1,000-yard mark, though placing second to another Five Star athlete.

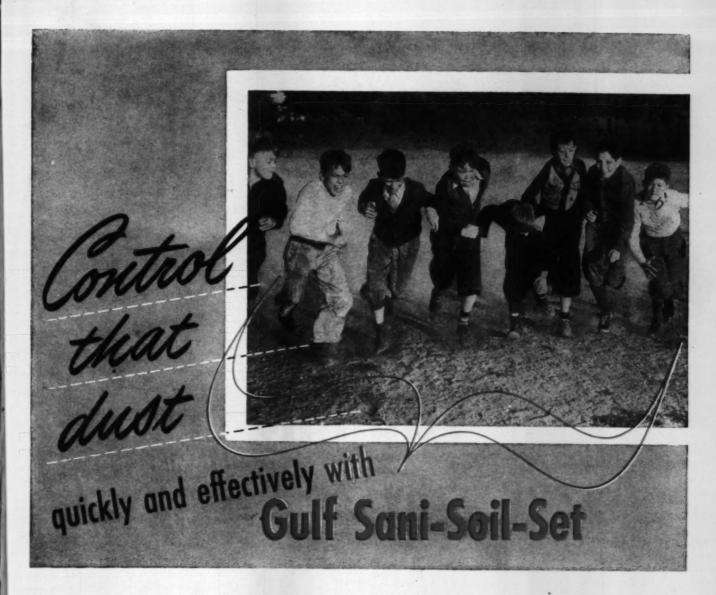
Core points to another case of several years back where a husky 200-pounder reported for track and was immediately dispatched to the shot-putting ring. The boy won some dual meets in the shot, but two seasons later Five Star had him running the dashes as well. The boy ran the 100 in 10.2 and set a new state record in the 220 with a time of 22 flat.

Core admits that his point transpositions may be a bit off in several events. But he is constantly striving to attain perfection. This year over 50,000 high school and college men from 18 states will work under the Five Star program.

Each year the physical education instructors and coaches mail copies of the individual performances to Core, who records them on a continuous graph. His usual procedure is to lop off both the top and the bottom five percent from each coach's report. He feels that the top five are accomplished track athletes while the bottom five are non-interested students who are taking the tests just because they have been asked to.

Core is now attempting to prove that a combination of two or more of the Five Star results will indicate a potentiality for a third event. For example, a good sprint, shot put, and high jumping score might indicate that an individual will make a good pole vaulter.

Lillard M. Ailor, former track captoin and shot putter at Washington and Lee U., is currently a sportswriter for the Richmond (Va.) Times-Dispatch.



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by RICHARD V. GANSLEN

LL our great vaulters have a definite training pattern which they observe with remarkable success. Some of their individual viewpoints are diametrically opposed. But their practice routines are very significant and may be studied by coaches and competitors with very beneficial results.

In this two-part series, the writer will attempt to compound the personal theories of America's six greatest vaulters. The writer has been in constant touch with these men during the past nine years, and the statements which follow represent answers to lengthy letters and questionnaires.

Several of the men completed more than one questionnaire in this period, and quite frequently the writer has been able to quiz the men personally at various national meets.

Throughout the presentation of the material, the writer will serve only as a moderator, amplifying the statements from time to time and, where necessary, indicating exhaustive research in this area.

The basic question may best be stated as follows: What do you think should characterize the movements in the major phases of the pole vault action?

#### THE RUN

Warmerdam: Use enough runway to generate top speed several paces from the take-off, holding the pole parallel or almost to the ground and

**GUINN SMITH** 

sistent 14-plus vaulter.

RICHMOND MORCOM

14-8; outdoor record, 14-31/4.

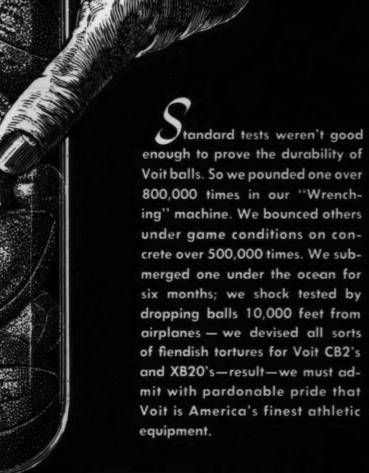
Co-N.C.A.A. and co-national A.A.U. champion. Vaulted 14 ft. at least 10

times in 1947. Best indoor mark,

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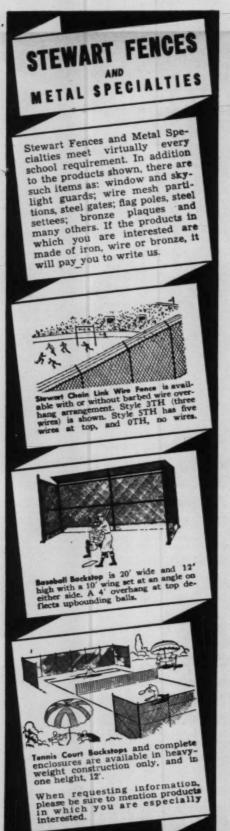
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running with a minimum of shoulder action and no movement of the pole.

I use about 140 feet of run as I gather speed slowly. Smoothness is the important factor. The faster the run, the better. But not if the speed is gained at the expense of a smooth, even run with regular strides.

In other words, the faster you can run smoothly, the higher you will vault.

Meadows: Relaxation and change of pace at the proper time. Feel as you near the box that you have perfectly judged the proper take-off mark. A limited or controlled amount of speed is recommended, not the maximum.

The pole carry should be such that the vaulter feels practically no exertion getting the pole into the box. An exception to this is when the vaulter holds high on the pole; the added length forces him to hold the front tip higher.

(Meadows carries the front tip of the pole at head height and slightly left of center of the runway.)

Sefton: The run should be smooth, controllable and even. Hit the same take-off spot each time.

Smith: Run at top speed until the last five strides, then relax and gather yourself. Always point the pole directly at the box with a relaxed comfortable grip.

Morcom: The run must be as fast as possible without strain. The pole carry varies with individual taste. However, a low carry produces more smoothness in the plant. By carrying at an angle across the body, a vaulter gets better speed and forward lean.

Richards: I think the length of the run should vary according to the ability to obtain the necessary speed. I personally run about 115 feet. As one runs, the body leans forward very slightly. This gives a stronger pole plant and more power.

The pole, in my estimation, should be horizontal to the ground, if not slightly pointed toward the ground. It should be carried so that the point bears right down the middle of the runway.

Commentary: A series of time trials conducted by the writer and other time trials conducted independently, gave very positive evidence that a man can run fastest with a pole when it is held at the height of the head.

This carry permits free leg action in the run, a moderate compensation for the weight of the pole, and moderate body lean. A too low carry, especially with a high grip, creates some tension in the left shoulder and arm and bothers many vaulters.

Most vaulters who use the head high carry begin to lower the pole toward the ground midway down the runway, so that by the latter stages of the run the pole is pointed at the box. There must never be punching of the pole or exaggerated shoulder swinging. But a very restricted movement is necessary to hold the vaulter's balance.

The length of the run is of no significance. Heavy men usually need more run to generate speed. There must be no slow-down at the box, merely a more relaxed feeling and concentration on the take-off.

#### TAKE-OFF AND POLE PLANT

Warmerdam uses a modified overhand shift, starting the pole shift on the third stride before the take-off. That is, just as he leaves his last running stride before the take-off foot strikes the ground.

In actual practice, this shift is made almost in mid-stride between the second and third step before planting the take-off foot. Smith considers Warmerdam's pole plant as the ultimate in smoothness and perfection.

Warmerdam: Elbows slightly flexed at the take-off, pole should split body. Although I never am conscious of springing off the ground, the left foot does stamp emphatically. I always try to run off the ground.

Meadows: I use the overhand shift. I do not think consciously of shifting the handgrip on any particular stride. It depends on the length of the stride and also on the height of the individual vaulter.

I find through a study of motion pictures that I make several shifts unconsciously as I approach the box, four strides from the pole's goal. The last shift is made on the right foot preceding the last take-off step.

The vaulter should feel the most resistance, not the least, with the minimum expenditure of energy. Feel as though you are still going forward and not upward until you take-off.

Sefton: Straight, smooth and balanced at the point of departure.

Smith: I use the overhand but prefer the underhand shift. I believe the pole plant should start two strides from the take-off. Ideally, the pole should keep going up without any pause once it starts. Warmerdam is perfect in this. I wouldn't emphasize a vigorous kick-up with the legs. Gather and spring slightly less than in high jumping and broad jumping.

Morcom: Shift as the right foot hits the ground before the take-off



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Westinghouse Electric Corporation - Lighting Division - Cleveland, Ohio COMMERCIAL - INDUSTRIAL - FLOOD - STREET - AVIATION

Services of a Lighting Sales Engineer are available through your near-by Westinghouse distributor foot. I think the underhand shift is smoother. A common fault with beginners is to jab the pole in with the overhand thrust. The underhand shift seems to aid in lifting the body as the arms are thrown up. The right knee is bent up.

The spring is like that in the broad jump where the body is ahead of the take-off foot. The motion feels as if it were taking me toward the pit.

Richards: I prefer the underhand type of plant, because I believe it gives added impetus to the motion forward and upward. Not only that, but this type of plant seems to afford me the best balance necessary for maintaining full speed coming into the box. All the motion in the underhand plant is upward, whereas in the overhead plant the first motion is downward.

The pole begins moving into the box as the left foot strikes after the take-off foot, that is, the third stride. By the time the foot lands, the pole is in the box and is moving upward.

#### TAKE OFF WITH A SPRING

I definitely believe the vaulter should take off with a spring; that is, the take-off should correspond to that of the high jumper. The take-off spring enables the jumper to overcome the low angle of the pole to the ground and aids in bringing about a delay in the swing. In almost this self-same movement, the right leg is brought forward and upward and the legs are extended to add centrifugal force to the swing.

Commentary: Most vaulters use a modified pole plant, a sort of underhand scooping motion with a slight side-arm swing in order to permit the arms to move freely past the hip.

It is quite probable that the pole plant contributes very little or nothing to the upward lift, but it may be of great psychological significance. Beginners frequently throw the pole up too fast and then can't catch up to it to swing past.

One other major fault in the plant is the tendency of some men to fully extend the arms at the take-off. I know of college coaches who teach this. With the arms fixed 90° to 110° at the take-off, the vaulter is in the best mechanical position to take up the shock of the swing onto the pole because he can permit partial extension and he can exert the maximum muscular force.

Over 68% of the men analyzed by the writer spring and accelerate their take-off velocity up to about Richard V. Ganslen, an instructor in the department of physiology and biochemistry at Rutgers U., is probably the world's foremost authority on pole vaulting. A former national champion himself, he has delved deeply into the mechanics of the event and probably has accumulated more scientific information on the subject than any man alive. Some of his findings have already appeared in Scholastic Coach: a three-part series, "Mechanics of the Pole Vault," which ran from March through May of 1947, and "The Pole Makes the Vaulter," which appeared last month. His current article is the first of a two-part series on how great vaulters train and vault.

three feet per second. Some of the poorer men lose speed in the takeoff, while the remaining vaulters neither lose nor gain speed leaving the ground.

Vaulters who stress a spring at the take off prefer the take-off point to be back a couple of inches from the vertical. The most common error in even great jumpers occurs when they are jumping at peak heights. They have a tendency to stride shorter in the early part of the run to build up speed, so that they suddenly start swinging into or under the bar. A quick check at the take-off will usually show that it is too far out.

Short vaulters seem to get the most benefit out of the spring. These men are not able to get as much centrifugal force in the swing and hence accelerate their swing velocity. Ohe, the Japanese star, used it to great advantage and the writer is a staunch follower of this school.

The right leg drive tends to drag the hips forward faster than a simple swing and permits a faster roll and pull-up. The legs should never be allowed to extend completely after the take-off, as the added pendulum length will make it more difficult to bring the left leg up fast enough to catch the right.

Vaulters should experiment with the spring. But, whether they use it or not, they should not hang onto the pole and drag along through the swing as many beginners do. The troubles of many beginning vaulters can be corrected by concentrating on vigorous forward and upward snap of the right leg.

#### THE SWING

Warmerdam: At higher heights, it becomes necessary to delay the pull-up very definitely. I try to keep my elbows flexed slightly. In short, they are not fully extended.

Meadows: My swing is too short. During the coming Olympic year, my attention will be wholly on increasing the angular arc and hoping to delay my vertical shoot. My attention is always directed at the bar.

Sefton: The vaulter should attempt to eliminate the swing, if possible. Of course this can't be done, but the vaulter should try and get into position for the pull-up as fast as possible.

Smith: Young vaulters don't swing enough and old ones like myself swing too long. It is impossible for me to say where the swing ends and the pull begins.

Morcom: I try to hold the swing as long as possible. A long swing requires good balance. If you are off balance and hold too long, you usually go under the bar off to the side.

Richards: I feel that the swing is the most important part of the vault and that the difference between a good and poor vaulter is the ability to swing correctly.

The secret lies in holding your pull-up until the legs have gone by the pole. If this movement is correctly executed, the centrifugal force generated by the swing and the power of the arms are blended harmoniously and complement each other in such a way that the utmost power is achieved.

#### VAULTING PARADOX

Commentary: In pole vaulting we have a peculiar paradox. The swing which will give the maximum efficiency from the viewpoint of speed and centrifugal force, also requires the maximum muscular force to pull the legs back and up.

The pole vaulter is always working against time. If he swings too freely, he can't get his legs back and upward before the bar. If the swing is too short, he kills the momentum of the pole and it never comes to the vertical.

The higher the hand-grip, the greater the delay necessary to conserve the pole momentum. Otherwise, the vaulter must use more speed in the approach. If the take-off velocity is the same, the speed and the duration of the swing will be directly proportional to the height of the hand-grip.

The prime function of the swing is to conserve the momentum of the pole. Any vaulter with powerful enough arm muscles can pull himself up well, as long as the pole does not stop moving forward.

#### PULL-UP AND TURN

Warmerdam: The turn is a twisting shoot upward, rather than a mechanical twisting of the body upward to face the runway. The pullup should be fast with the maxi-

(Continued on page 44)





## These ex-coaches wanted more income . . . and got it!

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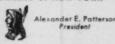
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#### **Guard Ball**

GUARD BALL was invented some 20 years ago by the writer to meet a need for a game similar to basketball which the younger boys (8 to 12 years) could play.

Although never officially published, it has been used by the writer in several cities as well as by his friends in physical education set-ups. It has proven extremely popular and is a fine medium through which to inculcate fundamentals and other basketball skills needed in team competition.

The ball: The game may be played with a basketball or volley-ball, but a volleyball is best for small boys.

Playing floor: Suitable for any size gym floor; does not necessarily require a high ceiling. The floor is marked off as follows:

Guard lines—a line across each end of the floor about three to six feet from the end walls.

Forward lines—a line across each end of the floor about 20 feet from the end walls. (On floors marked for basketball, you may use the end lines and foul lines.)

Scoring lines—a line four to six feet high marked with chalk, crayon or paint on the end walls. The space between this line and the floor is the scoring zone. Most YMCA floors have a wall board at this height so that no scoring lines are necessary.

Players: Practically any number of boys may be used. The writer has employed from two to 20 on a side. Twenty on a team, however, requires a fairly large floor.

Line-up: The game is played in halves of six to 12 minutes each. One half of the team sets up on the guard line; the other half on the forward line.

Start: The referee bounces the ball hard in the center of the floor, and the forwards scramble for it. Upon obtaining possession, they start working the ball toward the other team's goal.

After each goal is scored, the guards and forwards change positions. The guards must stay behind the guard line, while the forwards may play anywhere except in the opponents' guard territory.

Scoring: The ball is worked as in basketball by dribbling and passing.

To score, however, the player must shoot from the chest with both hands. The idea is to hit the wall under the scoring line.

Overhead, one-hand, and sidearm shots do not count. The ball must hit on the fly and solidly.

The guards try to block the shots and throw the ball out to the forwards. After every score, the referee blows his whistle and bounces the ball at center to resume the action.

Out of bounds: While the ball is in play, there is no out-of-bounds territory along the sides. The ball may hit the side wall and bounce into the court without stopping the action.

On fouls and violations, however, the ball is awarded to the opponents on the side of the court within three feet of the wall. On floors marked for basketball, the outside lines are used.

Held balls are called when there is danger of players bumping against the side walls, or when two players actually tie up the ball. The referee bounces the ball high between the two players or among the number of players who were near the play. The referee should keep telling the boys to spread out and pass, and not dribble too much.

Dribble: Officials do not have to be very strict with younger boys. They may permit them to bounce the ball with one or both hands and double dribble. With older boys, the regular dribbling and pivoting rules should prevail. When a player runs with the ball, the ball is awarded to the opponents on the side of the court.

Violations: Similar to basketball, except that no free throws are awarded. Violations include pushing, charging, holding, tripping, unnecessary roughness, and hacking. Penalty — give ball to opponents on side of court, three feet from wall, for a throw in. This also holds true if the guards step over the guard line or if the forwards enter the guard area.

If a player persists in unnecessary roughness, he should be benched until that particular goal is made.

Bruce Hunter is physical education director at the Allegheny Branch YMCA in Pittsburgh, Pa.

### The DANDUX Star REVIEW The Dandux "Balgrip"\* first baseman's mitt is another star performer that's winning professional and collegiate acclaim. The "Balgrip" glove snaps shut as soon as the ball hits the palm pocket . . . a great feature. There are 125 "Stars" in the 1948 Dandux Catalog . . . every one featuring the NO-DANDUX-thati 17! RAV Lockstitch. One look inside that catalog and you too will exclaim . . . \*Pat. Applied For Send for catalog. Sporting Goods Division . DANIELS, MD.

### Around the Infield with

- FRANK FRISCH, 2nd Base
- PIE TRAYNOR, 3rd Base
- HONUS WAGNER, Shortstop

SINCE it takes years to pick up the intricacies of infielding, the wise high school coach will not expect too much from his youngsters. He will always remember that they are just callow kids who are starting their baseball careers. All he can reasonably ask is that they field their positions properly and make the fundamental plays.

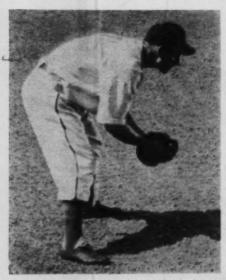
Simplicity should be stressed in all their coaching. But where time is available and the boys show an aptitude toward the game, the coach may inculcate many of the finer points.

The splendid instructional material that follows was presented over the Columbia Broadcasting system in a clinic devised and conducted by Red Barber. Several of the greatest names in baseball disgorged these nuggets upon prodding by Barber or some duly accredited agent of his.

#### FIRST BASE by George Sisler

How tall or how short should the first baseman be? And does it make any difference whether he is right or left handed?

While a left-handed boy is preferred because of the plays to second and third base, there have been



**Basic Infield Stance** 

some great right-handed first basemen, too. Size doesn't make much difference, either. Stuffy McInnis, Joe Judge and Lu Blue were all great first basemen, though small. What you definitely want is a man with a great reach.

What do you consider his primary job?

His attitude toward playing first base. A lot of boys believe that all there is to playing first is catching the ball from the infielders. I would call them stationary first basemen. The ideal boy is aggressive and moves around. In other words, he is a moving first baseman.

How about a few specific instances? Say on the sacrifice play.

The first idea is to get the man going to second or, with men on first and second, the man going to third. The first baseman starts in fast, and, if he can, tries to be moving toward second or third as he picks up the ball on the run. Then he can throw with the same motion.

Then, actually, the play to first is a last resort when you can't make the others?

That's right. You first try to make the play to second or third.

What about cut-off plays?

Ordinarily. a first baseman will handle all cut-off plays from center field. But a lot of first basemen also take them from left and right fields

Do you have any particular rules on plays where the pitcher covers first?

When a ball is hit toward the first baseman, he should go in for the ball and toss it underhand to the pitcher covering first as far out in front of the bag as he can. Too many men will toss it to the bag, confusing the pitcher coming over so that he will miss the bag.

If the play is over toward second base and he can't toss the ball, the first baseman should throw it to the pitcher just as the latter steps on the bag. The underhand toss to a pitcher should be up around the chin so that he won't have to look down or up in catching the ball.

How does a first baseman's play

differ with a man on base?

He places his right foot at the corner of the bag toward the pitcher and positions his left foot just a medium stride away. He faces the pitcher in such a way that he can cover the bag for a tag by merely dropping his glove. The position also enables him to go to the right or left and cover all sorts of throws from the pitcher.

How should a first baseman handle throws to first?

If no one is on and he is playing back quite a way, the first thing to do is to go over and find the bag with his left foot. I don't believe in going over there and straddling, because in the time it takes to straddle and kick back he could be taking in a bit more territory out in the field.

How about the "ballet stretch" that looks so terrific? Just why does a first baseman do that?

That's important only once in a while. If a play is close, he is supposed to catch the ball as far out in front of him as possible to save time.

Some first basemen will allow their heel to be the last part of the body that touches the bag. That is wrong. The toe should be the last part. By having the toe on there, he can stretch a little farther. This is unnecessary if the play is not close.

What is your advice on handling hard grounders and bounders?

The idea is to come in on every ball that's hit to you. This makes it much easier to judge the hop. By coming in, you can judge the hop and get it either on a short pick-up or on a big bound. It's always a bad thing to be back on your heels when fielding a ground ball.

#### SECOND BASE by Frankie Frisch

What is the toughest play a second baseman is called on to make?

That slow roller. It's got to be done all in one motion. You have to come in quickly and make an accurate underhand throw to first.



For play under the lights the Worth Official Niteball is the logical choice on any account—visibility, moisture resistance, extra-inning durability. It is the pitcher's choice for "feel," the batter's favorite for "punch." The cover finish given the whole hide at the tannery is impervious to repeated washing, the long-fibre kapok core is tightly sealed against dampness—the cover stays WHITE, the core stays HARD.

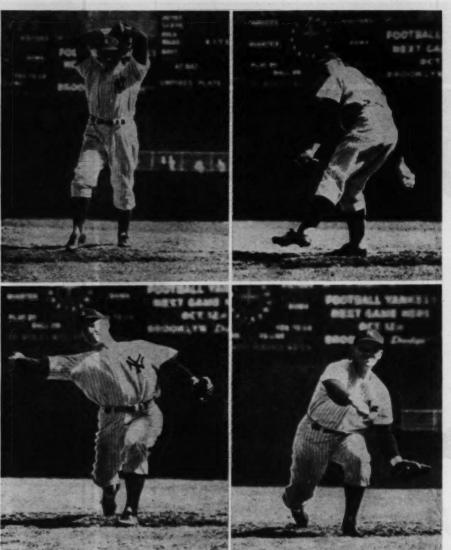
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Press Association

(Continued from page 24)

The second toughest play, I would say, is covering first base on a sacrifice. You can't leave your position too soon. Otherwise a left-handed batter might punch the ball through there.

What must a second baseman have in the way of physical equipment?

First, a good pair of hands. He must be a good judge of the ground ball, be able to catch a pop fly, must have a good arm, be quick, mentally alert, and, in professional baseball, he must know the hitters.

I'd like to give youngsters just one word of advice on those ground balls—plenty of practice. Have someone each morning hit about 20 balls to your right, 20 balls to your left, then 20 right at you.

How about some specific tips on playing second?

I would say play every ball hit to you with both hands, if at all possible. Never mind those fancy plays. That glove-hand stop looks fine, but get in front of every ball you can. Then practice throwing from all positions—underhand and overhand.

What about this business of handling a throw when working with the shortstop or the first baseman or the pitcher?

When the ball is hit to you and the shortstop is close by, don't throw the ball overhand. Just flip it to him underhand. Toss it gently, or you may knock the man down.

The shortstop and the second baseman should spend considerable time tossing the ball to one another, and the ball should be thrown letter or shoulder high so there is no lost motion in making the double play.

The keystone combination should have their own signs and the signs should be sound and set, especially for steal situations. Second base should never be left uncovered. When the catcher gives his pitchout sign, somebody must cover the bag.

What about the cooperation with the other fellows, such as the right fielder and the center fielder? Allie Reynolds, the Yankee righthander who won 19 and lost 8 last season, is a powerfully built six-footer with a live fast ball and a good curve. These pictures show him delivering his hard one with a sweeping sidearm motion. Note the excellent way he manipulates his weight, bringing it from the rear in No. 1 to the front in No. 4. If a fifth picture were available, it would show Allie bringing his back foot forward into a well-balanced fielding position.

I always had an understanding with my center fielder and right fielder on fly balls. Any time I raised my arms, they knew I was going to be in position or I would have a chance to catch the fly. They'd acknowledge it by yelling, "Come on Frank, it's all yours, come on." By letting me know where they were, I could avoid collisions.

How should a boy react after making an error?

Everybody makes errors and if you keep hustling and giving your best, the next play you make may save the game. Always keep your head down on every ball. Don't lift it, and when you fumble the ball, pounce on it. Never give up.

If you have no chance to make a throw, hold the ball. Don't make unnecessary throws. You may throw the ball away and lose the

Is it very important for the second baseman to know the catcher's signs?

He must know every ball that's being pitched. Suppose a left-handed hitter is up with the winning run on second base. A curve ball or slow ball is being pitched. Knowing the sign, you can move a bit toward first base.

If you don't get the sign, hold up the game. Call time; go in to the mound and say, "Mr. Pitcher, time please. I want to get this sign."

#### SHORTSTOP

#### by Honus Wagner

Describe briefly just what all good shortstops need in the way of mental and physical ability.

In the first place, you must have a good arm. If you haven't, you may as well play some other position because you'll never make a shortstop. And you must be quick on your feet, ready to shift backward, frontward, and to both sides.

After you've been playing shortstop a while, you'll want to figure the percentage on the plays. In other words, if a man hits to left

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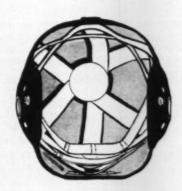
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field, you want to play a bit more toward third base. If he's a rightfield hitter, you want to move toward second. While your percentage may go wrong once in a while, in the long run you'll be the winner.

Will you define the normal terri-

tory of a shortstop?

As a rule the shortstop has more plays than anybody in the game. He must move back toward third for a left-field hitter; over toward second for a right-field hitter; and he must go out and get the relays from the left fielder on long hits.

Before every play a good ball player thinks what he'll do if he gets the ball. What's the importance of this in relation to shortstopping?

It depends on who is on base. You say to yourself: "If the batter hits the ball to me, I'm going to play it here. If he hits it over there, I'm going to play it there." You have to think out a hit. And you also have to consider what you're going to do with the ball if you boot it a little—where you're going to play it after you pick it up again.

What does the shortstop do on

bunt plays?

With a runner on first base, the shortstop goes over and covers second base. With men on first and second, it is his job to keep the runner on second glued to the bag to facilitate a force at third. He should bluff the man just as the pitcher throws the ball. Generally that will keep the man moving a little and hold him closer to second.

Is it important for the shortstop to know what the pitcher is throw-

ing?

Yes. The shortstop may get the signals from the catcher and relay them to the rest of the infield and the outfield. The pitcher may not always put the ball where he wants it, but if he does the percentage is in your favor.

#### THIRD BASE by Pie Traynor

How about listing the ideal qualifications of a third baseman?

You must have speed, a good arm, and be a quick thinker. You must have some cat in you to be able to start after a ball in a split-second, gather it up, and throw to first or second.

What is the most troublesome play?

A topped ball when playing your regular position. You must run in and take the ball between hops. You can't wait for the bounce, because a topped ball will invariably bound to the right or left and thus get away from you. So the wise

thing to do is to grab the ball on the in-between hop and throw it to first from whatever position it is fielded.

How should third basemen an-

ticipate a bunt play?

With a man on first and the score tied or one team a run ahead, the third baseman should anticipate a bunt. He should set up even with the bag so that the moment the pitcher releases the ball, he can run in and pounce on the bunt. Sometimes he will be able to make a play to second; other times he will have to throw to first.

With men on first and second and nobody out, I used to play close to the line. If the ball was bunted on the line, I could run in a few steps, pick up the ball, and

throw to first.

If you play over toward the pitcher, a bunt on the line is very tough to handle. The pitcher might be a heavy sort of fellow who can't get off the mound. By playing close to the line, you can pick up the bunt and with a natural swing of the arm, facing first base, throw the man out.

If the pitcher is alert and gets to the bunted ball, you can easily get back to third to take the throw and force the runner out at third.

Tell us about the proper stance

for third-base play.

As the pitcher delivers the ball, your hands should be on your knees. You shouldn't be standing up straight and pounding your glove, because if a ball is hit toward shortstop, you will invariably put your left leg out and lose that split-second jump in getting to the ball.

With your hands on your knees, you can cross your right leg over and go right into your stride for the

ball.

This also holds true for balls hit close to the line. Swinging your left leg over the right will throw you into the stride that enables you to get the ball a split-second quicker.

What are the different things a third baseman should know regarding his own pitcher? The signs and

the opposing hitters?

He should know if his pitcher has a good fast ball that afternoon and whether the batter is strictly a pull-hitter. He can thus play straightaway if his pitcher has enough stuff to keep the batter from pulling the ball

Now about signs. Every third baseman must get the sign from the shortstop. When I played alongside of shortstops, they wouldn't say anything on a fast-ball pitch. But the minute the curve was signaled,

(Concluded on page 52)

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Thanks to some live-wire promotion,

schoolboy baseball is back on its feet

WITH participation figures mounting steadily, baseball is now firmly planted on the comeback trail. More schools are now playing the game than at any period since the depression years.

This is all to the good. No other sport better caters to a boy's natural play instincts nor can surpass baseball as a wholesome, appealing and safe-and-sane activity. It hence merits the support of everybody interested in the development of a sound sports program for American youth.

In a poll conducted in connection with my master's thesis, I found that 80% of the men coaching two or more sports preferred baseball to any other team sport as an activity for their own sons to participate in during their school years—an indicative sentiment if ever there was one.

A successful college football coach, winner of six conference championships and two national titles, coached mediocre teams for the past two seasons. When asked why his elevens were not producing, he gave as his reasons: "The state rule barring spring practice and, most important, a comparatively new passion among young-sters for baseball."

I asked the coach at Lane Technical High School, Chicago, why over 1,000 boys reported every spring for his baseball teams. His answer was the same given to me by the coaches at Millinocket High, Maine, and Chino High, Calif.

"You don't have to interest the boys; they are already interested. Just give them a little equipment, a good schedule, a little sound coaching, and they will do the rest."

I might add that the coaches in these schools not only once played the game themselves, but have maintained their enthusiasm for it and handle their squads with the attention and dignity becoming a major sport.

Why do football and basketball draw larger crowds and clear enough profit in many sections to run the entire athletic program? Mainly because of the publicity and the ballyhoo built around the teams.

One way to increase crowds is to keep your sports program before the public's eye. Remember that high school boys play better baseball when friends come to the games and take an interest in them. The same build-up used in basketball and football can be used in baseball.

The following states have had baseball as a definite part of their physical education program for nearly 50 years: Arizona, Connecticut, California, Colorado, Georgia, Iowa, Illinois, Indiana, Louisiana, Maine, North Carolina, New Jersey, New York, Michigan, Ohio, Pennsylvania, South Carolina, Utah, and Vermont.

Iowa has probably done more to increase interest in baseball than any other state. The number of participating teams has grown to approximately 800, which is greater than in any other state. This growth is further evidenced by the state association sponsored summer baseball program, which attracted close to 100 teams last summer and ended in a tournament in August.

#### BEST RUN TOURNAMENT

The Iowa High School Baseball Tournament, held at Manson for 15 consecutive years, is without doubt the best run baseball tournament of its kind in the country.

Previous to the opening game, there are clinics covering everyone from the bat boy to the umpire. The brochures published are worthy of a professional team. Progressive business houses vie to enter advertisements and pay well for them.

Public address systems are set up, official programs printed, past records included in the programs, awards publicized, banquets held, motion pictures shown, and clinics are sandwiched in between games.

The tournament lasts one week, generally the last week in May, with the players spending the week in Manson. The superintendent of schools, who has been in charge of the tournament, has done a great job. No stone is left unturned by his committees.

The meteoric rise of Bob Feller has probably had something to do with baseball enthusiasm in the Iowa schools. But more important is the fact that authorities have given the sport the proper stress in their curricular and extra-curricular physical ed programs.

The number of major league scouts who attend the Iowa championships attest to the high calibre of ball played in the secondary schools.

Because of a short season, limitation of funds, and lack of interest on the part of authorities, baseball has not received the same promotion in other sections of the land. Many feel that district and state championships are out of the question.

Where authorities have backed the coaches, this has been proven false. Texas runs a highly successful championship, thanks in large part to the director of athletics at Dallas. Schools come from all over the state to play at Dallas. And if you have ever travelled in Texas, you can readily understand why every state in the Union should be able to follow their lead.

A few administrators feel that due to the short season, little time should be devoted to schoolboy ball.

Indiana has the answer. Back in 1937, the recreational division of the state, with the help of the Amateur Baseball Congress, continued high school baseball during the summer months.

The idea has now become standard operating procedure. Close to 700 teams participated last season, so that Indiana, known as the basketball state, now has baseball rivaling basketball. Anything which

## Soaring to POPULARITY



Yes... the new S5 football is rapidly soaring to popularity among school and college coaches. Official in every respect, the S5 has much to offer coaches who are constantly striving for more distance, greater accuracy and better gripping. The modern design of the S5 assures perfect balance... the newer leathers, better gripping... the overall construction, greater durability. See them ... compare them ... and you will proclaim them as your favorite.



can keep 20,000 boys of school age busy during the summer, might be worthwhile for other states to look into

The method used in Indiana does not conflict with the great job being done by the American Legion. It is supplemental to it. In fact, both groups have increased their number of participants.

A few other states have borrowed the idea. In Iowa, Illinois, Kansas, Montana, Nebraska, New York, New Mexico, Ohio, and South Dakota, baseball has even been given a prominent part in the summer

coaching clinics.

New Jersey, with its regional championships, has been stimulating baseball interest in the high schools since the end of the war. Newark, the professional team owned by the New York Yankees, has done much for the secondary schools by promoting tournaments.

A novel idea of creating more interest was attempted the evening of May 27, 1947. The Tri-county Conference sponsored a twilight game "to create more interest in high

school baseball."

Ex-major leaguers played against the pick of the high school stars of South Jersey. Held on the Swedesboro High School diamond, the game drew a wonderful crowd.

Ideas like this draw many new spectators who may later become regular fans. Baseball has played a prominent part in the athletic programs of the North Jersey schools for over 50 years.

#### THE GARDEN STATE STORY

New York, the birthplace of our national game, has probably done more for its athletics and its coaches than any other state, with the possible exception of California. Baseball has been stressed as a major sport since athletics were first introduced into the secondary schools.

The New York State High School Bulletin contains the following statement: "To bring the diamond sport back to the high schools of this area, the Niagara area adopted a new and radically different plan for baseball competition." It involved a full summer schedule for

high school teams.

In Mississippi many schools which had never previously fielded a team started baseball in 1947, and also entered the state association sponsored contests. Here is an excerpt from a leading newspaper in Jackson: "After a lapse of nearly 20 years, high school baseball has returned to Mississippi in a big way. High school baseball is indeed back,

and back to stay if present indications mean anything."

Georgia has not only increased interest in high school baseball by extending the season into the summer months, but recently played host to scholastic teams from six other southeastern states in a tournament held at Atlanta.

The ideal climate of California is probably responsible for the many high school baseball tournaments held there every spring. In addition to the high school authorities who foster baseball, there are many men's clubs interested in boys, which are responsible for tournaments at the conclusion of the high school season, particularly in Southern California.

#### BENEFITS COLLEGE BALL

The interest in school ball has been a major factor in the good baseball played by the colleges of California.

High school baseball coaches and other coaches are paid well for their work in this state.

Florida, with ideal baseball weather all year round, has not emphasized high school baseball, but the large cities have done much to make it a major sport.

Probably the best example is Miami, where many major league teams have trained. Miami High School not only draws crowds to its games, but makes it a paying proposition by playing under the lights.\* With a 35¢ admission price and attendance averaging four figures, it doesn't take a mathematician to figure that it pays. The gate receipts in one season were \$1,800. The team not only cleared expenses but had several trips.

In sections where authorities feel that all sports should pay their own way, it might be wise to follow the example set by Miami High. The majority of secondary schools do not have spring football to interfere with their baseball programs, as they do down there, yet Miami managed to win 18 out of 20 games in 1943. When it was suggested that the schedule be cut the following year, Coach Valibus, who had been very successful, resigned and accepted a coaching position in one of the parochial schools.

Are there any good excuses for any high school not having baseball? George Wentworth, coach at Stearns High School in Millinocket, Maine, which is just about as far

"If you have ever pitched a game of baseball under the hot sun of a June day, you will understand why night baseball is advisable in the secondary schools of Florida, aside from the financial remuneration. north as you can go in the U.S.A., says, "We start baseball practice when the snow is still on the ground. The boys are anxious to play the game. Why deprive high school athletes of an opportunity to play a game they love and which is so beneficial to them? Although a game or two may be postponed, we always finish out our schedule."

Boys in the secondary schools of Maine are just as interested in playing baseball as the boys in Florida or in California.

Pennsylvania, a state which has fostered football and basketball championships but given little impetus to high school baseball, is now following the rest.

There have been district championships in baseball but never a state play-off. In the districts where championship eliminations have been held, agitation for state title eliminations similar to basketball is marked.

Due to the season ending the first week in June, it has been suggested that the play-offs be held in June or July when the school term is over. With the proper emphasis, baseball can draw crowds in Pennsylvania.

Eight years ago I proposed that the Philadelphia Suburban Leagues have play-offs at the conclusion of the league schedules. Ninety percent of the coaches at the meeting voted for the plan and it was put into effect the following season.

#### PARTICIPATING SCHOOLS DOUBLED

I wrote Edmund Wicht, P.I.A.A. secretary, regarding the championships and asked why we did not have state champions. He was mildly interested stating that, "The matter of cost is probably one of the reasons why not more than half the schools in Pennsylvania are represented by baseball teams." Another reason given was that, "The season is short and many times hampered by inclement weather."

Exactly 449 schools were represented by baseball teams in 1940, and 882 are now playing baseball in the state. There are 1,270 schools in the Pennsylvania Interscholastic Athletic Association.

The American Legion has done much for high school boys in areas where baseball had not been emphasized too much. But there is something about high school rivalry which brings out the real competitive spirit in youth.

The P.I.A.A. authorities have finally started to do something definite about emphasizing high school



#### **BOB FELLER says:**

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-W. C. "TOM" SAWYER, Director, National Americanism Commission, The American Legion

"An excellent book . . . He tells a good story and, at the same time, teaches sound baseball."

-FRANK GRAHAM, Sports Editor, N. Y. Journal-American



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baseball. Consequently there is an upsurge in interest and district championships have been extended throughout the state. A state championship series similar to the basketball finals, might climax the baseball interest.

A good example of real baseball interest in Pennsylvania is the city of Philadelphia, where baseball has been a major sport since the inception of athletics in the secondary schools. Every high school in the city has a baseball team entered in the public high league.

Since there are 12 senior high schools and three vocational schools, only one league game is played with each school. Other games are scheduled with parochial and suburban schools. At the end of the season, a championship game is played between the leaders in the Parochial High League and the leaders in the Public High League.

In 1947, a night game was played for the first time and 7,500 spectators paid their way into Shibe Park to see Southern High School defeat North Catholic High, 5-4, to win the Philadelphia Evening Bulletin Cup.

Philadelphia, which runs its entire athletic program for its pupils, has playoffs in football, basketball, swimming, cross-country, bowling, and baseball. Their varsity athletic program is not fostered for financial gain, but they do make money on their championship games.

Exactly \$2,533.78 worth of tickets were sold at the Philadelphia interleague baseball championship games in 1947. It was found from experience that night baseball not only drew larger attendance than games played in the daytime, but provided an opportunity for parents and friends to see the boys play.

Adult price of admission to the baseball game was \$1. Students paid 35¢ and could only get their tickets at the high schools. A sum of \$100 was made on broadcasting rights. Incidentally the game was probably the first high school game in the United States to be televised. Additional money was made from the sale of programs.

It is true that the rental of Shibe Park and incidental expenses cost around \$568, with an additional \$168 for promotion and \$52 for officials. But after all expenses were cleared, there was still between \$500 and \$1,000 profit.

The profits were distributed evenly among the high schools in both leagues. I would suggest, as a rule, that the profits be used for the advancement of scholastic base-

ball, as all high school boards are not as lenient as Philadelphia in regard to buying athletic equipment and financing teams.

Certificates were given to all participants, which was a nice gesture on the part of the authorities and appreciated by the boys. The Philadelphia Evening Bulletin offered a trophy and prizes. A dinner was given to players, parents, and guests. The Philadelphia Inquirer and Daily News also made awards.

In the city of Chester, one game in a series between the public high and the parochial high not only drew over 2,000 spectators but cleared over \$100 in receipts. (Just a natural rivalry between two good teams.)

In the senior high school at Upper Darby, we have two organized baseball teams which play 17 or 18 games against other schoolboy nines. We also have several junior high teams which compete against other junior highs.

Our junior varsity plays an intramural schedule during the first six weeks, then, in the last four weeks, plays a schedule of games against other junior varsities. These games are played either when the varsity is away or on days when the varsity isn't scheduled.

#### ALL SOPHOMORES RETAINED

All sophomores who come out for baseball are kept on the squad until the end of the intramural program. Next year, when we expect to have an extra diamond, we intend to keep all sophomores who are eligible and who abide by training rules, for the entire season. No cuts will be made until their junior year. This method will give every boy an opportunity to play and will sustain his interest right through the summer months.

Our boys are expected to cooperate in keeping down expenditures. And they generally are conscientious about this, since they know that additional equipment will not be available once the season gets underway.

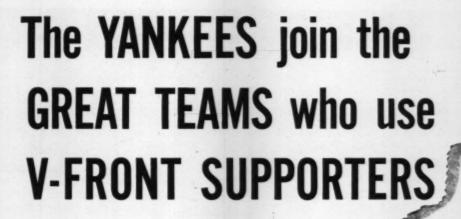
Coaches who expect to carry the majority of boys who come out for baseball, should keep the following things in mind:

 A system whereby each player is held responsible for equipment, including his own.

An accurate record of all expenditures in order to keep within the budget.

3. Managers should be responsible for bats, balls, gloves, flags, and bases. (Bases and flags taken inside after each game or practice.)

(Continued on page 46)



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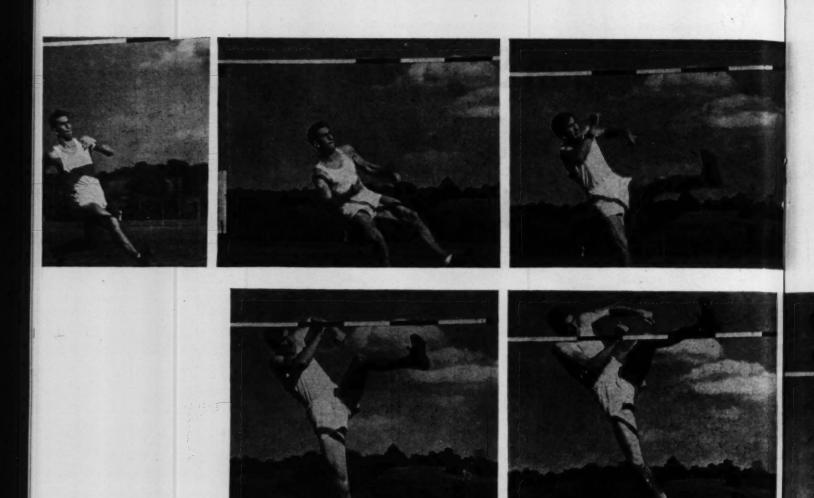
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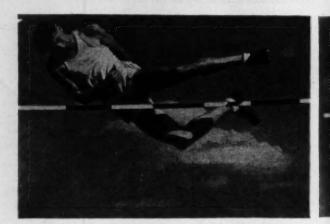
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The knees are still flexed as the athlete approaches the straddle position (7). In his spectacular layout, four individual idiosyncracies are noticeable: the unusually elevated position of the upper body (8); the stiffness of the knees; the close position of the legs; and the manner in which the arms are tucked away out of danger (9).



As the jumper clears the bar (10), he starts his descent by dropping his left leg and untucking his arms (11). He falls into the pit with the arms leading the way. The result is a near-perfect three-point landing, the left leg and both arms effectively absorbing the shock (12). While not a pure example of the straddle, this jump has effectively utilized the jumper's natural spring.



# The jumper approaches the bar with a well-defined forward body lean but, before hitting with his right foot, he reverses the body angle to aid the upward lift (1). He starts his lift with a stiff-legged, free-swinging action of his left foot (2), abetting the upward projection with an upward-arm throw (3). The angle of approach is determined by the style used and by personal preference.

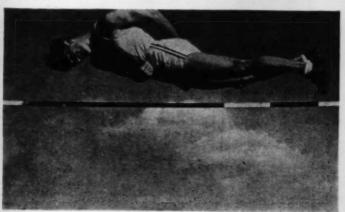
# The Belly Roll

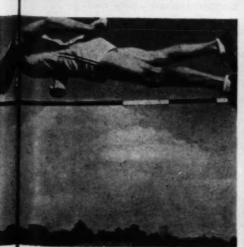
FROM FILM, "THE HIGH JUMP,"
IN THE UNITED WORLD TRACK & FIELD SERIES



The left knee flexes (4) and a natural reflex action starts the take-off knee upward (5). The natural knee lift becomes voluntary as it approaches the bar (6). A coordinated leg and upper body action plus normal dynamic tension lifts the jumper directly upward. The inside arm balances the leg kick, controlling the natural turn of the body. A fine arm lift always aids the jump.











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ALABAMA UNIV.—University, Ala. Aug. 25-28. H. D. Drew, director. Courses: Football, Basketball, Baseball, Track. Staff: University staff. Tuition: Free.

ARKANSAS ST. COLLEGE—State College, Ark. June 17-19. Other details to be announced.

BETHANY COACHING SCHOOL—Bethany, W. Va. Aug. 16-20. John Knight, director. Course: Football. Staff: Don Faurot, Red Drew. Tuition: \$30 (includes room and board). See adv. on this page.

COLBY COLLEGE—Waterville, Me. June 10-12. Ellsworth W. Millett, director. Courses: Football, Basketball, Training, Staff: Howard Hobson, Ray Eliot, Nelson Nitchman, Walter Holmer, Dr. T. E. Hardy. Tuition: Football, \$10; Basketball, \$10; both, \$15.

COLORADO COACHES ASSN.—Denver, Colo. Aug. 23-28. N. C. Morris and Don R. DesCombes, directors. Courses: Football, Basketball, Track, Wrestling. Staff: Jeff Cravath, Bowden Wyatt, Dr. L. C. Butler, Ellison Ketchum, Frank Potts, Julius Wagner. Tuition: Free for members; \$5, others.

COLORADO UNIV.—Boulder, Colo. June 12-July 18, first term; July 21-Aug. 22, second term. Harry G. Carlson, director. Courses: Football, Basketball, Track, Health Ed., Training, Recreation. Staff: Frank Potts, Frosty Cox, others. Tuition: Per term, \$24 for resident; \$45, others.

CONNECTICUT UNIV.—Storrs, Conn. Aug. 23-27. George Van Bibber, director. Courses: Football, Basketball, Baseball, Soccer. Staff: Lou Little, Bob Higgins, Doggie Julian, Norman Daniels, Joe Bedenk, Bill Jeffrey. Tuition: \$10. See adv. on this page.

EASTERN PENNA. COACHES ASSN.— East Stroudsburg, Pa. June 21-25. Marty Baldwin, director. Courses: Football, Basketball, Baseball. Staff: Bobby Dodd, Biggie Munn, Herman Hickman, Doggie Julian, Charley Gelbert. Tuition: \$30 for state coaches: \$32, for others (includes room and board).

GEORGIA COACHING CLINIC—Atlanta, Ga. Aug. 12-18. Dwight Keith, director. Courses: Football, Basketball, Track, Training. Staff: Red Sanders, Jim Tatum, Jim Cavan, others. Tuition: Basketball, \$10; Football, \$10; both, \$15.

INDIANA BASKETBALL SCHOOL — Logansport, Ind. Aug. 12-14. Cliff Wells, director. Staff: To be announced. Tuition: \$10.

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University of Missouri

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JERSEY SHORE H. S. FOOTBALL— Jersey Shore, Pa. May 1. Max Cook, director. Staff: Bob Higgins, Lefty James. Tuition: Free. See adv. on page 68, March issue.

ette, La. Aug. 11-13. Woodrow W. Turner, director. Courses: Football, Basketball, Track, Baseball, Boxing, Training. Staff: Wally Butts, Dutch Meyer, Ed Diddle, R. L. Browne, others. Tuition: \$2, state h. s. coaches; \$5, state college coaches and outside h. s. coaches; \$8, outside college coaches.

MICHIGAN H. S. ATHLETIC ASSN. (Lower Peninsula)—Mt. Pleasant, Mich. Aug. 16-20. D. P. Rose, director. Courses: Football, Basketball, Training. Staff: To be announced. Tuition: \$15.

MICHIGAN H. S. ATHLETIC ASSN. (Upper Peninsula) — Marquette, Mich. Aug. 9-13. C. V. Money, director. Courses: Football, Basketball, Training. Tuition: \$15.

MINNESOTA COACHES ASSN.—Minneapolis, Minn. Aug. 17-20. H. R. Peterson and Chet Roan, directors. Courses: Football, Basketball. Staff: Hank Iba, Wes Fesler. Tuition: Free for members; \$10, others.

MISSOURI UNIV.—Columbia, Mo. June 22-24. Don Faurot, director. Courses: Football, Basketball, Baseball, Track, Training, Physical Ed. Staff: Ray Eliot, Don Faurot, Hank Iba, Wilbur Stalcup, John Simmons, Tom Botts, Ollie De-Victor, Dr. Jack Matthews. Tuition: \$10.

MONTANA UNIV.—Missoula, Mont. July 26-30. Douglas A. Fessenden, director. Courses: Football, Basketball. Staff: Lynn Waldorf, Adolph Rupp.

NEBRASKA ACTIVITIES ASSN.—Lincoln, Neb. Aug. 12-15. O. L. Webb and A. J. Lewandowski, directors. Courses: Football, Basketball, Track, Baseball. Staff: To be announced.

NEBRASKA UNIV.—Lincoln, Neb. June 8-July 15, short session; June 8-July 30, long session. Louis E. Means, director. Courses: Physical Ed., Coaching, Recreation. Staff: 13 University staff members. Tuition: Regular university fees.

NEW MEXICO COACHES ASSN.—Albuquerque, N. M. Aug. 8-14. Elwood S. Romney, director. Courses: Football, Basketball. Staff: Ray Eliot, Bernie Bierman, Ozzie Cowles, Adolph Rupp. Tuition: \$15.

NEW YORK BASKETBALL SCHOOL— Hancock, N. Y. Aug. 19-21. John E. Sipos, director. Staff: Roy Greene, John Lawther, Whitey Anderson. Tuition: \$10

NEW YORK STATE—Clinton, N. Y. Aug. 23-28. Philip J. Hammes, director. Courses: Football, Basketball, Baseball, Track, Wrestling, Six-Man Football, Training. Staff: To be announced.

OHIO FOOTBALL COACHES ASSN.— Canton, Ohio. Aug. 9-14. J. R. Robinson, director. Staff: Bennie Oosterbaan, Art Valpey, Don Faurot, Bob Higgins, Bobby Dodd, Herman Hickman, Paul Brown, Sid Gillman. Tuition: \$5 for members; \$10, others.

OKLAHOMA COACHES ASSN.—Oklahoma City, Okla. Aug. 16-20. Clarence Briethaupt, director. Course: Football. Staff: Howie Odell, Carl Snavely. Tuition: \$5.

PENN ST. COLLEGE—State College, Pa. June 8-25, inter-session; June 28-Aug. 7, main session; Aug. 9-27 and Aug. 30-Sept. 18, post-sessions. Courses: All Sports, Health Ed., Physical Ed., Recreation. Staff: College Faculty. See adv. on page 38.

on page 38.

RHODE ISLAND COACHES ASSN.—
Providence, R. I. May 28-31. Gig Pariseau, director. Courses: Football, Basketball, Baseball, Track. Staff: Bob Higgins, Moose Krause, Doggie Julian, Boston Braves Baseball Club. Tuition: \$20.

SOUTH DAKOTA ATHLETIC ASSN.—
Spearfish, S. D. Aug. 18-21. R. M. Walseth, director. Courses: Football, Basketball. Staff: Stu Holcomb, Frosty Cox. Tuition: Free to state coaches.

TEXAS COACHES ASSN.—Abilene, Tex. Aug. 2-7. L. W. McConachie, director. Courses: Football, Basketball, Baseball, Track. Staff: To be announced. Tuition: \$10, members; \$15, non-members; \$25, sporting goods companies.

UTAH ST. AGRICULTURAL COLLEGE -Logan, Utah. June 7-11. E. L. Romney, director. Courses: Football, Basketball. Staff: Fritz Crisler, Jack Gardner. Tuition: \$10.

WASHINGTON ST. COACHES ASSN.—
Seattle, Wash. Aug. 23-28. A. J. Lindquist, director. Courses: Football, Basketball, Training, Football Officiating.
Staff: Fritz Crisler, Hank Iba, Frank Cramer, others. Tuition: \$7.50 ea. for Football and Basketball. See adv. on page 38.

WEST VIRGINIA UNIV.—Morgantown, W. Va. June 3-July 14. F. J. Holter, director. Courses: Football, Basketball, Baseball, Track, Administration, Training, Officiating, Staff: Dud DeGroot, Lee Patton, Steve Harrick, Art Smith, Henry Stone, others. Tuition: Residents—\$5 per hour (1 week), \$25 for 6 weeks; Non-residents—\$7 per hour (1 week), \$35 for 6 weeks.

WESTERN ILLINOIS ST. COLLEGE— Macomb, Ill. July 8. Ray Hanson, director. Courses: Football, Basketball. Staff:

Stu Holcomb, Adolph Rupp.

WISCONSIN COACHES ASSN.—Madison, Wis. Aug. 16-20. Harold A. Metzen, director. Courses: Football, Basketball, Six-Man, Training. Staff: To be announced. Tuition: \$1, members; \$10, others.

WYOMING UNIV.—Laramie, Wyo. Aug. 9-13. Glenn J. Jacoby, director. Courses: Football, Basketball. Staff: Murray Warmuth, Doggie Julian. Tuition: \$10. See adv. below.

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UNIV. OF WYOMING
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MURRAY WARMUTH, Tenn.
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Ball-Band

55

MISHAWAKA RUBBER & WOOLEN MFG. CO., MISHAWAKA, INDIANA

# A Joint Football Code for Schools and Colleges

(Continued from page 5)

eligible player, the ball will remain in play. At the end of the down, the penalty will be enforced or declined. Also, if a forward pass touches an ineligible player in or behind the line, it is treated as a type of illegal pass which carries a penalty of loss of 5 yards and loss of down.

11. Any number of substitutions will be permitted while the ball is dead and the clock is not running. When the ball is dead and the clock is running, one substitute may enter in the Collegiate game and two may enter in the High School game.

12. A field goal may be scored by any drop kick or place kick during a kick from scrimmage or during a return kick or during any free kick other than the kick-off.

13. Right to advance a recovered kick is determined by whether the kick is recovered behind or beyond the scrimmage line.

# RULES MACHINERY

These are illustrations of provisions which will govern the game during the coming season. Some of these are the same as those which existed in either the Collegiate or the Federation code during the past year. Others are different from the provisions in either of the past codes. In each case, the provision has been included for purposes of greater simplicity or greater equity.

Arrangements are now being made to set up nationwide machinery whereby features of the new code can be studied by groups of coaches, officials, and players. A series of football meetings will begin in August and will extend through the early part of September. Meeting leaders will be appointed in each state and there will be ample opportunity for full discussion of each provision of the new code.

Many groups will be relieved to know that, while there are still some differences between the high school and the college games, these differences are confined to a few major provisions which are necessary because of the different need in the two age groups.

The basic fundamentals are now the same for both types of games and it should not be difficult for any student of the rules to learn them well enough to "keep" on the fingertips.

# Basketball Rules Changes For 1948-49

RARELY, indeed, do we get the chance to pick up the basketball rules changes while they're still piping hot. So when we heard that the National Basketball Committee were in town the other day, we slipped into our sneakers and fast broke into their territory, looking for Mr. H. V. Porter, the Committee's indefatigable workhorse.

Naturally we picked the worst possible time for him (and the best possible time for us) to burst in on him. Mr. Porter had just dribbled away from the annual N. B. C. huddle, and was hunched over his desk poring over a freshly mutilated rules book.

"Sit down," he said, waving a pencilcramped batch of fingers at us. "I was just transcribing the changes into a little more legible form. But I suppose I can read them off to you."

And here they are, fellers, the 1948-49 basketball rules changes – direct from the workhorse's mouth, if Mr. Porter will pardon the expression.

- 1. Coaches will be permitted to talk to their teams (from the bench) during charged time-outs and intermissions. (Eliminates illegal sideline coaching.)
- 2. Substitutes will be permitted to enter a game merely by reporting to the scorekeeper, instead of both to the scorekeeper and the officials. He cannot enter the game, however, until the referee beckons to him.
- 3. A player on whom a foul has been called must raise his hand so that he can easily be identified by the scorer.
- 4. All jump balls will be played off at the nearest of the three six-foot circles, thus eliminating scrambling for positions and bringing the play nearer to the center of the court.
- 5. The rule covering "continuous motion" by a player fouled in the act of shooting will be liberalized to allow almost any subsequent legal movement except a dribble.
- 6. The official intermissions before the second and fourth quarters of high school games will be reduced from two minutes to one minute.
- 7. Players will be numbered with digits no higher than "5". (Not mandatory, but strongly recommended.

- 8. In college games, the clock will be stopped every time the ball becomes dead during the last two minutes of play (instead of three, as is the current practice).
- 9. A foul committed during a dead ball will still be considered a technical, except if it occurs during a throw-in. It will then be considered a personal foul.
- 10. Positional restraints similar to those applying to a jump ball will be in force during throw-ins. The defense will not be permitted to line up two or more players in adjacent positions if an opponent desires to get in between.
- 11. Any player withdrawn during a time-out will be allowed to return before play is resumed.

### EXPERIMENTAL RULES

So much for the actual changes. As you can see, no definite action was taken on those two growing nuisances — (1) the stalling game and (2) the roughhousing that usually marks the last few minutes of close games.

The Committee, however, is well-aware of these irritants, as Mr. Porter was quick to point out.

Insofar as stalling is concerned, the Committee strongly urges all coaches to avoid such tactics. The responsibility is placed squarely on the team behind in the score. If they are on offense, they are expected to try to go in and score. If on defense, they are expected to go out after the ball.

The other problem (rough play in the closing minutes) will be the subject of some extensive experimentation next season.

The Committee has devised two experimental rules for the last two minutes of play, both of which are predicated on the jettisoning of the right to waive a free throw. In other words, the toss will have to be taken. But there is ample compensation for this.

In the first rule, if the try is successful, the ball will be brought to the foul line for a jump. If the try is missed, the ball will be in play.

The second experimental rule offers the offense a still greater advantage. If the try is successful, the thrower will be given the ball out of bounds. If the toss is missed, the ball, as before, will be in play.

The idea behind this legislation is to make the penalty for fouling (in the last two minutes) so severe that a team will think twice before gambling on roughhouse tactics. In neither case will they get the ball if the free throw is made.

Before we left, Mr. Porter also mentioned a third piece of experimentation tabbed for next season—a rule which will give both inside alleys to the defensive team on a free throw. This will help eliminate cheap tap-ins.



# Dermatophytosis treated with SOPRONOL'

J. H.-Dermatophytosis of the feet-incapacitated; returned



J. H., white male, age 29—incapacitated. Both feet acutely inflamed, with weeping, vesiculation, scaling. Skin was brawny, violaceous in color. Marked pain and pruritis.

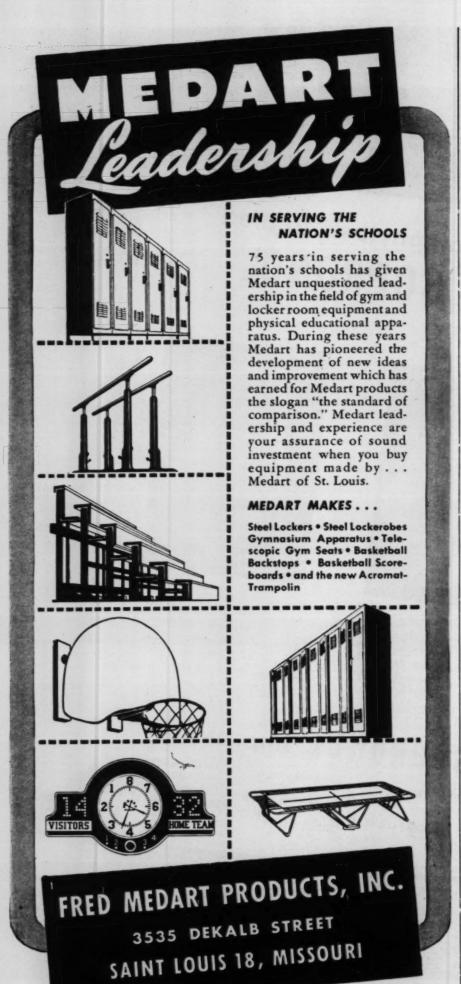


Ninth day of treatment with powder and solution, Sopronol Improved. "Marked healing" - absence of symptoms, no evidence of continued activity of infection. Skin discoloration now a pale pink.

# SOPRONOL Improved

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# **Pole Vaulting**

(Continued from page 20)

mum effort possible, and the vaulter must stay as close to his pole as possible throughout the pull, turn and push-up.

If this effort is properly carried out, the body will be in a perfect position to be pushed with the legs high and an upward momentum. I never concentrate on the turn, but when it is off I can usually trace it back to my take-off.

Meadows: Action of the legs is nil at the pre-pull stage or roll-back position, but the hips and body are snug to the pole. Attention should be on foot elevation. The vaulter should maintain this position on the pole and let it work for him.

# TIMING IN THE TURN

I don't consciously think of timing in relation to the turn. The unbalanced body position on the pole and the right leg sweep vertically, dictates the turn. Proper delay of the left leg helps the body complete the turn with an arch position over the bar.

The turn should be fast, not jerky, A too hurried sweep with the right leg will not bring the pole to the vertical and the vaulter will lose the secondary lift from the pole.

Sefton: Maximum vertical effort in a face down position, as early as possible.

Smith: One-quarter pull on the take-off and ¾ pull when the feet reach the level of the head. Not too much leg action in the swing. Knees are slightly bent and legs are thrown out in the turn. The turn is "habit formed."

Morcom: The pull-up and turn are all timed by watching the crossbar. I don't know how I know when to pull-up. I try to shoot my legs so that they just clear the bar. The turn seems to start as the knees cross the bar and blends in with the finish of the pull-up.

Richards: The pull-up corresponds directly with the chin up on the bar. I aim to pull my body with my arms so that my hands go by my face and rest on my chest. The added impetus of the right leg twisted across the chest affects the turn.

The time to pull is when the legs have started upward. The focus of attention is to lift the body and legs right up along the pole. The only change is to put your body between the pole and the bar, with the shoulders more or less vertical. (There is a natural tendency to rush into the pull-up at high heights regardless of the grip. This is usually due to over-anxiety. When the high grip is used, this premature pull is fatal to the vault because the pole never comes to the vertical.)

#### THE PUSH-UP

Warmerdam: As straight down on the pole as possible. If the turn is properly executed, the body will be in perfect position to be pushed up with the legs high and an upward momentum. Always keep the body close to the pole, both going up (after swing) and pushing away, where the pole should be touching the right shoulder. I always felt I had some upward momentum after leaving the pole.

Meadows: The pull and push should be a continuous blended motion swinging and pulling. A drive from the pole is most essential. Dick Ganslen does this successfully . . . it looks as if he has no push at all, but it is covered by the fact that he unites it with his swing so successfully.

Ganslen should be given credit for developing an essential phase in scientific vaulting. It has its potentialities with a man who understands physics and momentum. The release should begin when the feet and legs are dropping. That is, the thought of the release should already have started when the hips are even with the bar.

Smith: Push-off should be a continuation of the pull. My best vaults are made when I have no sensation of actual pushing. The release should be accomplished when you fly right off the end of the pole.

Morcom: Many vaults seem to have no definite push-up. By that I mean, where the body is actually lifted by pushing downward on the pole. It seems to me that most of my power in getting above the hands comes from the pull-up.

Richards: The push-up is not distinct at all, but rather it is a harmonious operation with the swing and pull. The swing, pull and push are all part of one continuous motion upward and over. However, I definitely feel that each must be emphasized. Most vaulters wait too long in their push. The push should be executed immediately following the swing and pull upward.

Sefton: All that it is possible to get straight downward on the pole.

In his next installment, the author will cover in the same detailed fashion the mechanics of clearance, hand grips, and training advocated by these six great pole vaulters.

# "RIFLERY...

# a safe and popular sport"

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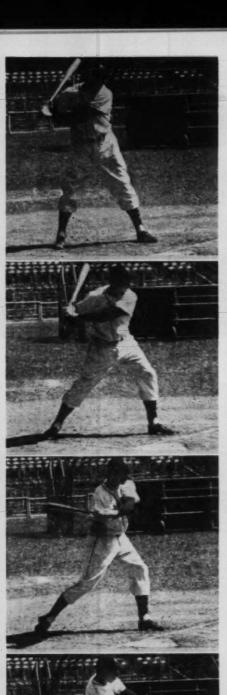
Gentium

Our superisone with Riflery in the high school here has growed to us that the result of the second country of the past several paster in story of our growth, as were the public seventy subserve yearing other has several paster in story of our growth, and factilities are claim to subserve the public several paster and the public several paster of the public severa

Remington will help you plan the organization of a rifle club and the building of a range. As a starter, we shall be glad to send you, free, an interesting, fully illustrated booklet containing instructions on the operation of a rifle club—including infor-

mation on equipment, marksmanship, target shooting, the construction of rifle ranges, and many other subjects of practical value. Just fill in the coupon and mail it to Rifle Promotion Section, Remington Arms Company, Inc., Bridgeport 2, Conn.









# On a Streetcar Named Success

(Continued from page 34)

4. Allowance for repairs and cleaning equipment.

5. Allowance for officials.

6. Proper transportation.

7. Attempt to keep medical aid apart from your budget.

Distribution of expenses for equipment over a period of years.

Allowances for increases or decreases expected in gate receipts.

10. Advertise and run budget in business-like manner. (Get equipment bids from three or more concerns.)

11. Have schedules printed by local business concerns. (Companies will do this for advertising.)

#### EQUIPMENT

At Upper Darby, all new equipment, including uniforms, is bought for the varsity team. The old equipment is handed down to the junior varsity. Since the jayvee plays its games when the varsity is away, we do not rely too much on using the same equipment.

It is a wise thing to build up a separate stock. I have found that suits will last more than five years with careful handling. At the end of the season, all equipment should be cleaned and stored away.

There are two schools of thought regarding the use of uniforms in practice. One is to use gym suits or old clothes, and thus save the uniforms for games. The other is to suit up for every practice, so

# **BOBBY THOMSON**

This tall, strongly built Giant outfielder broke into the big time last season with a resounding .283 b.a. which included 29 home runs and 85 runs batted in. The first thing noticeable about his style is its close resemblance to the Joe DiMaggio modus operandi. This isn't a coincidence. Thomson has deliberately patterned his style after the great Yankee slugger's.

He takes the same wide stance with the shoulders perfectly level and the bat cocked well back. As the pitch comes in, he takes a very short sliding step into it and whips the bat around with a powerful shoulder and arm action.

Contact here is nearly perfect. The bat is parallel to the ground and the ball has been met just in front of the plate off a straight front leg and a bent back member. In the last picture, the wrists are just about to turn over; they will bring the bat over to the other side in a natural follow through.

Now check the position of the head. It hasn't moved a peg from beginning to end. The eyes have never left the ball.

EXCLUSIVE COACH PHOTOS

that the practice will always approximate game conditions.

In districts operating on a small budget, the former practice saves money.

The best way to preserve baseballs is to stop practice and look for every ball that is lost. If you don't hand the balls out too freely, the boys will learn they are expensive.

Many coaches give their players all the balls that are left over at the end of the season. This way they can be certain the boys will play ball during the summer.

Nearly every school athletic treasury has a balance at the end of the season. Football and basketball, while taking more time and effort to run, contribute most to the till.

#### THE BUDGET

In the smaller schools, where funds are insufficient, various methods of raising money have been devised. Minstrel shows, plays, candy and cake sales, circuses, carnivals, exhibitions, movies, merchant donations, or the sale of novelties, are all used for this purpose.

One school I know of resorted to twilight baseball, and the gate receipts reached an all-time peak. While twilight ball may be frowned upon, it may pay dividends where everything else has failed.

The disadvantages are few and not of a serious nature.

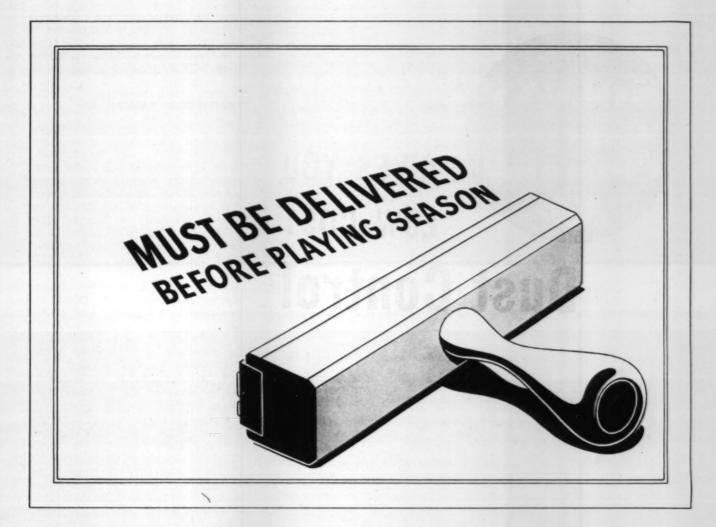
The National Federation at its convention in Biloxi. Miss., January 6-10, discussed an expanded baseball program which has been worked out in cooperation with the major and minor leagues. It will involve a larger program for high schools running into the summer months.

This program also covers an agreement with professional leagues so that they will not disturb the high school boy until he graduates. Secretary H. V. Porter said: "Tryouts for high school boys, if held at all, will be during the summer when school is not in session."

An intensified use of motion pictures is planned to develop ability and create additional interest in the sport.

Baseball publicity material was carried in all the National Federation publications in 1948, including the official pamphlets and rulebooks.

Several states, not having summer baseball, have recently adopted a rule permitting high school play-

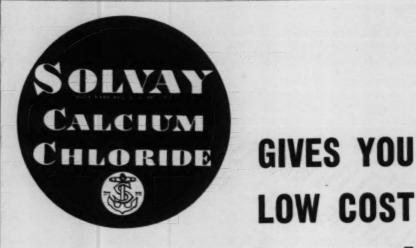


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ers to participate in baseball schools or tryouts while school is not in session.

A new baseball play situation book will be published soon.

#### PROFESSIONAL BASEBALL AID

- 1. Professional baseball, comprising major and minor leagues, made an agreement with the National Federation prohibiting professional teams from signing high school players until graduated from school. The agreement also forbids any type of contract until the players' class graduates. This was amended in 1947 to include all high schools, after the Zoeterman case in Chicago.
- 2. Encouraging baseball during the summer months by aiding organizations financially and other-
- 3. Tryout schools are being held in many areas at the close of the high school baseball season.
- 4. Motion pictures are loaned to the schools for use in assemblies, clubs, etc.
- 5. Scouts cover all areas where the calibre of high school baseball is high. Last year the St. Louis Cardinal system made a survey of the high school baseball program, in order to locate the areas where baseball is mostly played.
- 6. High school baseball clinics are offered the services of speakers.
- 7. Trophies are awarded and passes are given to high school coaches.
- 8. Many clubs set aside a week day as guest days for schools.
- 9. The Boston and New York teams invite youngsters regularly to their games as guests.
- 10. The late Herb Pennock, beloved general manager of the Phillies, invited high school players annually to games and clinics at Shibe Park. His players and coaches instructed and criticized the youngsters. They were admitted to the game gratis after the instruction. It wasn't unusual for him to give me a blanket pass for 150 boys or all the players in an entire league.
- 11. The Philadelphia National League team announced in 1948 the innovation of an annual contest to select the best secondary school player and take him on a western trip.

# FOREIGN COUNTRIES

Our English cousins have taken up baseball seriously. It is taught in North England schools during the physical education periods. Hull is the center of school baseball in that section. Liverpool has the most interest in the south of England.

Many Englishmen of wealth who like the game and have seen the benefits derived from playing it, are buying equipment. Archer Leggett, British sportsman, in a recent letter to me expressed the feeling of many Englishmen interested in baseball: "I think the days I miss most are the days of the old baseball, at least we seemed so far away from worries and troubles in those days."

Baseball has thrived in the Japanese schools since its introduction 50 years ago by a Japanese who came to the United States to study our railroad systems but returned to devote his time to baseball.

Latin America: There isn't an American school of note in Central or South America where baseball is not played by the students.

Cuba: Enthusiasm for baseball by the schoolboys of our island neighbor to the south is not rivaled in any other island where the game is played.

Mexico: Mexican boys can be seen playing baseball from dawn to dusk. A letter I received from the director of physical education in Mexico City stated that "they hoped their boys would play baseball rather than watch bull fighting."

A pitcher on the last U. S. Olympic team, Carson J. Thompson is now baseball coach at the Upper Darby (Pa.) High School. He is also a big league talent scout and chairman of the Philadelphia Suburban Coaches of Baseball.

# **Base Running**

(Continued from page 13)

bases are occupied with less than two out. The batter is always out (automatically) on a fair fly ball which can be handled by an infielder. The umpire makes the call immediately.

A simple yet major factor in base running is the necessity of touching every base. In the same category is the need for watching the runner ahead. Any runner passing another runner is automatically out.

Both these dangers may be avoided by concentrating on the base to which the advance is being made, rather than on the ball.

As a general rule, the number of outs controls the aggressiveness in base running. With none out, for instance, it is advisable to play safe and only attempt to advance when you are sure the next base can be safely reached. The element of chance is increased with one and two



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# Coaches' Corner

Please send all contributions to this column to Scholastic Coach, Coaches' Corner Dept., 220 East 42 St., New York 17, N. Y.

Joe DiMaggio was discussing those \$75,000 salaries being paid to a few baseball heroes. He explained that a player's peak activity is limited to a few years, that he is conscious of this constant fight against the inroads of age, and that he must make the most of his limited time at the top.

Listening to Joe without any sympathy was Mrs. Paul Gallico, wife of the famous author. "Now," she said, "you have some idea of how it feels

to be a woman.

Talk about queer coincidences! Mel J. Nicks, hoop coach at Campion High, Prairie Du Chien, Wis., offers the season's topper. In Campion's 13th game, played away from home, Captain Steven Saunier (13 letters in his name), wearing No. 13, broke his ankle in the 13th minute of play. Also, there were 13 students on the

The golfer sliced his tee shot into the woods. His opponent heard him swing twice before getting back on

"How many?" he asked. "I'm two," was the reply.

"But I heard you swing twice in the woods.'

"Oh, that first one was only a practice swing."

His opponent thought for a moment. then said, "Well, okay, but that's the first time I ever heard a man cuss on a practice swing.'

"For many years I have enjoyed the friendly boasting of my fellow coaches in Coaches' Corner," writes Harry M. Sheue, director of athletics and track coach at Huntington Beach, Calif., High School. "Now I'd like to stick my own neck out. Can any small high school in the land present a better set of track and field records than Huntington Beach?

"Although we have less than 300 boys in the 10th, 11th, and 12th grades, we have hung up the following stand-

ards:

100 vds.-9.6 220 yds.-20.7 440 yds.-49.4 880 yds.—2:02.2 High jump—6-2 Mile-4:30.4 120 h. hurd.

220 low hurd.-24.3 12-lb. shot-46-81/2 Broad jump-22-61/2 Pole vault-12-71/2 880 Relay-1:31.2

"All these records were made in the Southern California, State, or National meets, so that the timing cannot be questioned. All in all, our boys have copped over 30 individual championships in the aforementioned meets."

High man on the basketball scoring poll for 1947-48 was young Wally Piekarski, captain of Tilden Tech, Chicago. Wally rammed home 91 points (37 goals and 17 fouls) against Dunbar, a city rival, in leading his team to a 122-22 victory.

Coach Joe Felipe, of Oroville (Calif.) High's championship five, received quite an education at the annual roundrobin tourney in Redding, Calif., on March 4-6. An exacting stylist, Joe arrived at Redding on the look-out for anything that might help him in his coaching. He figured he had hit the jackpot when he chanced to overhear Coach Carl Gilmore, of Redding, giving a likely looking group of young men a few last minute instructions.

These boys were suited up and looked about ready to play ball. The conversation went something like this. "All you boys will do a round-off and back roll. And don't forget your forward roll-aways. Frank, you can do your high back roll and finish with a push up. And Johnny can do his plain back rolls."

Joe, whose mind runs strictly to screens, blocks, slips, and all the other intricate basketball patterns, hustled himself into the gym and placed himself in a front row seat, where he could get a close look at this marvelous of-

"Boy," he thought, "if these guys have a good fast break to go with that stuff, they'll really be the team to beat."

Imagine his chagrin when Coach Gilmore's boys ran out and proceeded to put on a grand display of plain and fancy tumbling! Felipe still goes around mumbling, "Round-offs, back rolls, push-ups, phooey." (Passed on by Hugh L. Harrison, Oroville director of athletics.)

Sportdom's gaudiest dresser most certainly is golfer Jimmy Demaret. His wardrobe includes more than 70 pairs of pants, some 25 multi-hued perseys, 19 sport coats, 60 shirts, and 48 chapeaux. Playing at Philadelphia last May, Jimmy went out one day in an outfit composed of nothing more sensational than light gray trousers and a bright blue jersey.

'Why so subdued today?" inquired

a friend in surprise.

"I'm in mourning," Jimmy snapped without hesitation.

One afternoon when Fresco Thompson was managing a schoolboy baseball club in a charity game, one of the kids kept pestering him with an endless flow of silly questions. Fresco finally lost his patience.

"One thing more," the kid said. "I'm hitting under the ball. What can I do

to fix that?"

"There's only one thing to do," Fresco said grimly. "Take your baseball shoes and put in thick innersoles.'

Biggie Munn, the head man at Michigan State, tells us that "Every now and then something turns up that deserves to be passed around to other schools and colleges. That's how I feel about the formula our grounds-keeper, Albert Amiss, has been using to mark our football field. It works beautifully, rain or shine.

"Here it is: Put 100 lbs. of whiting in 35 gal. of water and 11/2 gal. of weed killer, and mix well. Then put a 2-in. brush on the marker and apply the mixture to the field on a warm, dry day. Goodbye worries for the season. Your lines will never be erased. Do not slap it on your stadium, however!"

George Earnshaw, the former righthander who is now a pitching instructor for the Phillies, used to be one of Babe Ruth's "cousins." So when the Babe visited the Phillies' camp this spring, he greeted Earnshaw with a loud, "Hello,

"Forget that cousin stuff," Earnshaw rejoined. "I could strike you out lefthanded the best day you ever saw.'

(Concluded on page 52)



Amateur Athletic Union

Gosh, we have the wrong tape. This is the one for the women's 100-yard dash!

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"I don't think that 104-yard touchdown run was he longest jaunt in schoolboy football last season," writes Coach Stan Huffman, of Hinton (W. Va.) High, in answer to a Coaches' Corner item last month. "One of my boys, Pat Shien, galloped 106 yards for a t.d. on a line plunge against Princeton High."

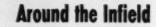
"Line plunge?" Sounds more like a fake kick from the end zone.

Few pitchers can throw a ball harder than Rex Barney, the Dodger chucker. The only thing is he can't get it anywhere near the plate. On this count his notoriety is far reaching and sometimes embarrassing. Rex says that back in Omaha last winter he kept in shape refereeing basketball games One night he called one against the home team at a critical moment.

For a few seconds the stands were silent. Then came the voice of doom: "Ball four" it said.

Know how much it costs to feed, lodge and train a big league baseball system? Just \$202,206.56. At least that's what it cost the Phillies this spring. In 42 days, the 481 Phillie players, managers and coaches consumed 60,000 eggs, 3,200 pounds of butter, 25,000 quarts of milk, 12,600 loaves of bread, and 26,000 pounds of meat, among other delectables. The hotel bill came to \$63,000 and transportation, \$24,000. The 10,500 baseballs used in training cost \$21,000, while 1,500 bats came to \$4,500.

Don't fail to see our May issue. It will contain a complete round-up of the state basketball tournaments—winners, scores, coaches, pictures, etc.



(Continued from page 28)

they would use my name as follows: "Come on, get in the game, Pie." That helped me quite a bit.

What's the only cut-off play a third baseman has?

A ball hit to left field. He must go halfway into the plate. If the runner passes him, he should know he can't get him at the plate. So he should cut the ball off to keep the batter from going to second.

How should a third baseman make a play on a twisting high foul ball over near the third-base stands?

He should run as fast as he can toward the stands. Then if the ball isn't hit close to the stands, he can weave his way back. If he goes over rather slowly, he always has that mental fear that he's going to crash into the stands.

Suppose with runners on first and third, nobody out, infield playing in to cut the runner off at the plate, the batter hits a sharp ground ball, say to the first baseman. What should the third baseman do?

He should run as fast as he can toward home when the ball is thrown to the plate—run in and get even with the runner coming in. The catcher throws him the ball and he tags that runner, then keeps the man who has rounded first from going to second.

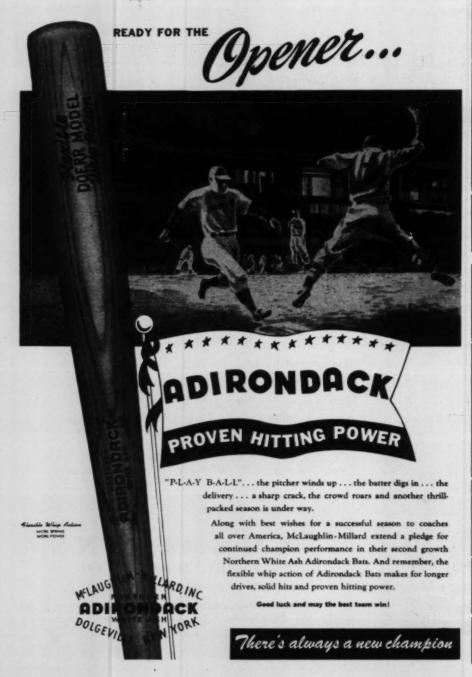
(The supposition here is that the runner coming in from third will be hung up between the bases. If the third baseman doesn't charge in with him, as recommended by Traynor, the runner can fiddle between the bases until the runner from first comes around to third and the batter advances to second. By coming in with the runner, the third baseman can make a quick tag and prevent the other men from advancing.)

What's the best way for a third baseman to throw the ball?

The natural way for a third baseman to throw is decided by his body build. If he throws overhand naturally, let him throw that way. The best way to throw is the natural way for him to get the ball away quickly.

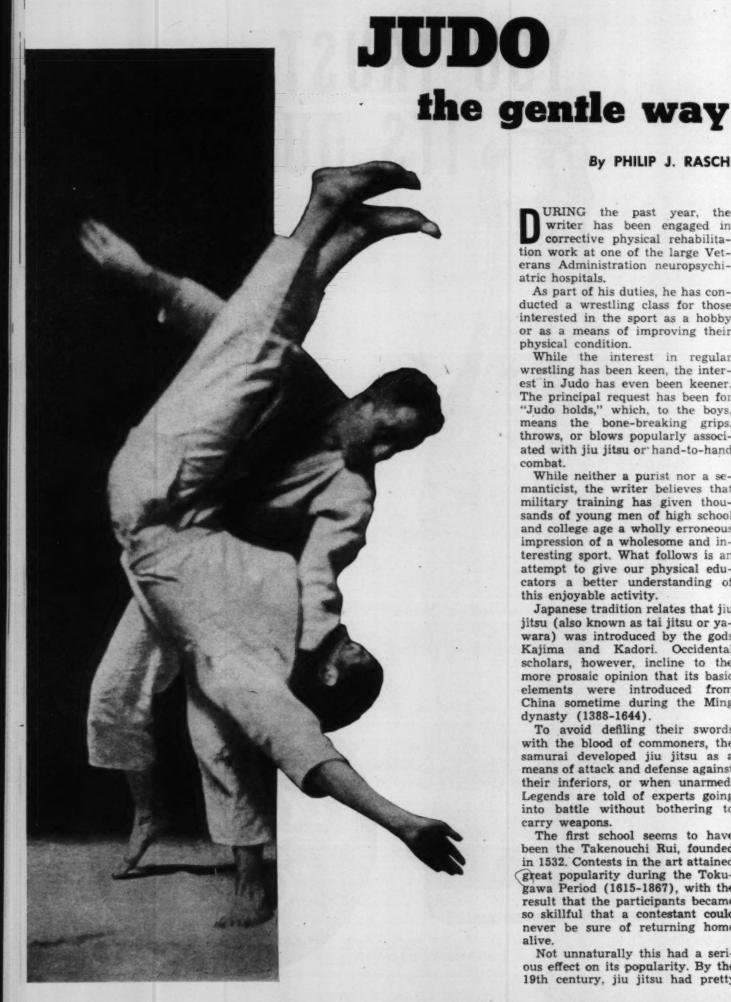
Suppose with a man on second, a left-handed hitter bluffs a bunt to draw the third baseman in so the runner on second can steal third. How do you cope with that situation?

You must be able to follow the ball to the batter and, if he misses, you must be able to get back to the bag.



# YOU TRUST ITS QUALITY





By PHILIP J. RASCH

URING the past year, the writer has been engaged in corrective physical rehabilitation work at one of the large Veterans Administration neuropsychiatric hospitals.

As part of his duties, he has conducted a wrestling class for those interested in the sport as a hobby or as a means of improving their physical condition.

While the interest in regular wrestling has been keen, the interest in Judo has even been keener. The principal request has been for "Judo holds," which, to the boys, means the bone-breaking grips, throws, or blows popularly associated with jiu jitsu or hand-to-hand

While neither a purist nor a semanticist, the writer believes that military training has given thousands of young men of high school and college age a wholly erroneous impression of a wholesome and interesting sport. What follows is an attempt to give our physical educators a better understanding of

Japanese tradition relates that jiu jitsu (also known as tai jitsu or yawara) was introduced by the gods Kajima and Kadori. Occidental scholars, however, incline to the more prosaic opinion that its basic elements were introduced from China sometime during the Ming dynasty (1388-1644).

this enjoyable activity.

To avoid defiling their swords with the blood of commoners, the samurai developed jiu jitsu as a means of attack and defense against their inferiors, or when unarmed. Legends are told of experts going into battle without bothering to carry weapons.

The first school seems to have been the Takenouchi Rui, founded in 1532. Contests in the art attained great popularity during the Tokugawa Period (1615-1867), with the result that the participants became so skillful that a contestant could never be sure of returning home alive.

Not unnaturally this had a serious effect on its popularity. By the 19th century, jiu jitsu had pretty

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well fallen into disrepute, although it was still taught by a number of masters representing several different schools.

In the latter part of that century, Jigoro Kano made a study of these various systems and concluded that all movements should be based on the principle of "the highest or most efficient use of mental as well as physical energy, directed to the accomplishment of a certain definite purpose or aim." The methods best exemplifying this principle were then refined and the objectionable features eliminated in order to reestablish its popularity as a sport.

### ART OF GIVING WAY

In 1882 Kano opened the Kodokwan, or "school for studying the way," the way being the concept of life itself. His methods of attack and defense were taught under the name of Judo, meaning "gentle way," that is, the art of first giving way in order to achieve ultimate victory.

While jiu jitsu literally means "gentle art," its striking, kicking, and choking features scarcely fit into this definition. The words are interpreted as meaning the practice of the most efficient use of mental and physical energy to secure the desired results, i.e., defeat of the opponent, while judo is understood to refer to the principles underlying this practice. Professor Kano has stated that the term jiu jitsu is seldom used in present-day Japan.

When the Olympic Games were held at Los Angeles in 1932, Professor Kano, then well advanced in years and possessor of such titles as Honorary Professor of Higher Normal College, Member of the House of Peers, Honorary President, Japanese Amateur Athletic Association (of which he was the founder and former president), gave one of the most interesting speeches made at the Games.

In striking contrast to most of the western speakers, he stressed the intellectual, moral and emotional phases of the sport he had fathered. Competitive judo, he said, develops earnestness, sincerity, caution, deliberation, attention, observation, conservation of energy, patience, imagination, reasoning ability, and judgment. Victory is achieved by the inexorable application of the most efficient mental and physical energy, not by brute force.



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<sup>&</sup>lt;sup>1</sup> Professor Kano gives jiudo and jiujutsu as preferable terms. However, the spellings used in the text are so commonly accepted it seems useless to try to change them now. It may also be noted that he always capitalizes the two words.

Application of this principle to our daily life should teach us to acquire useful knowledge and make the best use of our opportunities. It should also teach us to do this in the most efficient manner possible, that is by proper application of psychological laws.

Morally, judo inculcates good sportsmanship and develops a high spirit of honor. A man who is gloomy and discontented will be brought to realize that this is an inefficient attitude. He will then consider what action is best under the circumstances and be guided ac-

cordingly.

Emotionally, the practice of judo provides the pleasures of exercise, skill and victory. Beside this, the spectator is given the esthetic enjoyment of witnessing graceful movements. Parenthetically, we could probably make identical claims for our own style of wrestling, if we really tried to teach "education through physical education," but the writer has yet to see a wrestling coach who makes an attempt to impress these intangible lessons upon his charges.

The costume worn in judo consists of a heavy kimono, which appears to be woven out of string and reaches halfway down the thighs and arms; a pair of short pants, extending about halfway down the lower leg, and a belt to hold the

kimona closed.

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# UTILIZES THE CLOTHING

The origin of judo in self-defense is thus clearly revealed, for this was the every-day apparel of the ordinary Japanese of a few hundred years ago, and the sport is cunningly devised to utilize this clothing in the execution of the various tricks.

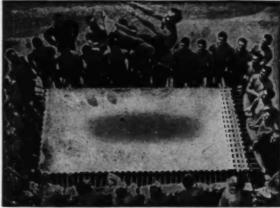
The belts are of different colors, each revealing the degree of proficiency attained by the wearer. The novice wears white; students of the first class, yellow; of the second class, blue; of the third class, brown; of the first, second, third, fourth and fifth grades, black; of the sixth, seventh, eighth and ninth grades, red and white; of the tenth and all higher grades, red.

So far as the writer knows, there are no experts of the sixth grade or above in America. Separate color markings are provided for women.

Advancement is achieved by defeating in competition three men of the rating just above one's own. When the black belt is attained, a diploma is awarded by the Japanese headquarters. The student is then eligible for instruction in the dan-

(Continued on page 68)

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# New Books on the Sport Shelf

• THE THREE-TWO PITCH. By Wilfred Mc-Cormick. Pp. 186. New York: G. P. Putnam's Sons, \$2.

OUR big beef against most juvenile sports fiction is that the narrators are authors first and sports experts second, so that their projection of the sport usually is not only absurd but leakier than the infield of a seconddivision ball club.

In a few instances, the story itself compensates for the shortcomings of the technical treatment. But, in four out of five cases, the bumbling inexpertness of the technical parts just

about ruins the story.

That's one of the big reasons we got such a boot out of The Three-Two Pitch. Here's a story obviously written by a guy who knows his baseball and knows it well. It teems with solid fundamental and inside stuff and may actually serve as a manual for aspiring ball players.

A dozen cuts above the run-of-themill kid novel, the book is recommended unreservedly for your squad-

men and your own sons.

Bronc Burnett, a 16-year-old high school boy, is its hero. Like all boys, he wants to be a ball player more than anything else in the world. He possesses all the physical attributes to become one. But he is afflicted with "rabbit ears."

When the opponents discover his weakness, they practically ride him off the team. However, under the wise coaching of "Cap'n Al" Carter, an exbig leaguer, Bronc not only learns to govern his temper but learns a great deal about how real baseball is played.

All this is told in rousing, fastmoving fashion with great fidelity to the proprieties of inside baseball. You'll root for Bronc from the first

inning to the last.

We're happy to see that the publishers will follow the Bronc Burnett saga through four subsequent books. All of them will combine a world of "how-to-play" information with the yarn itself.

(See adv. on page 34)

. INTRODUCTION TO HUMAN PHYSIOL-OGY. By William D. Zoethout. Pp. 424. Illustrated - photographs and diagrams. St. Louis: The C. V. Mosby Co. \$4.

SCHOOLMEN interested in obtaining a fundamental knowledge of the operation of the human body but having no previous knowledge of the basic sciences of physics and chemistry, will find this book a very neat solution to their problem.

The author, who is professor emeritus of physiology in the Chicago College of Dental Surgery (Loyola University), presents this knowledge from the ground up in a simple but scientific manner, complementing the context with numerous helpful illustrations and diagrams.

He covers the field exhaustively in 25 chapters, touching on absolutely everything of physiologic importance.

Since the functions of a machine cannot be understood without some knowledge of its construction, the physiologic discussion of an organ or a system of organs is prefaced by an exposition of its anatomy insofar as it is needed as a basis for this discussion. The reader is not burdened with irrelevant anatomical details.

Furthermore, to render the study of physiology interesting and of practical value, the author has stressed those phases which bear directly upon the maintenance of health.

A number of questions have been inserted at the end of each chapter. Some serve to test the reader's understanding of the subject matter, while others are aimed at personalizing the knowledge acquired.

The book is simply but beautifully written and should prove stimulating to both the physical educator-hygienist and the student of physiology.

· LABORATORY EXPERIMENTS IN PHYSI-OLOGY. (Fourth Edition.) By W. D. Zoethout. Pp. 263. Illustrated—photographs and drawings. St. Louis: The C. V. Mosby Co.

THIS superb laboratory guide has been carefully overhauled and many changes, most of them minor, made to bring it up to date. Several experiments have been deleted and a few new ones added. Some new illustrations also have been included.

While especially planned to accompany Dr. Zoethout's Textbook of Physiology, it makes no direct reference to it, so that any other text-

book may be used.

In preparing this guide, the author took careful aim at the student whose time allotment to the subject is somewhat limited. He selected the simpler experiments and those requiring a minimum of laboratory equipment, and refrained from burdening the book with directions for the elaborate demonstrations usually performed by the instructor.

The directions for procedure are very explicit, and all the new "set-ups" for apparatus are richly illustrated. To guide the student in the nature and content of the problem, practically all the experiments are prefaced with "preparation" tions which aim to lead up to the problem and to connect it to a certain extent with the facts already mastered.

All in all, the book presents 262

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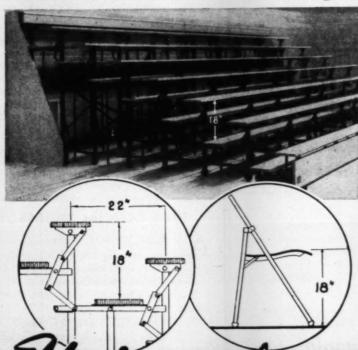
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The book is designed to serve as a useful guide for courses ranging from elementary human physiology to advanced mammalian or medical phys-

. HERE'S HOW IN SPORTS. By Morie Morrison. Pp. 128. Illustrated-drawings. New York: Doubleday & Co. \$2.95.

HERE'S a light, engaging, and very helpful text offering excellent shortcuts to real skill in 23 sports activities.

The author, a Far West reporter and expert on sports, has cleverly combined simple, easy-to-understand drawings with humorous but explicit text. He hits at the basic fundamentals of each sport and does a fine job, indeed.

He covers archery, badminton, baseball, basketball, boating, bowling, boxing, camping, fishing, football. golf, handball, hiking, hunting, ice skating, jumping, running, skiing, soccer, swimming, tennis, table tennis, and weight lifting.

The book is particularly recom-mended as a visual aid for beginning sports classes.

. FOR COMPREHENSIVE STADIUM REPAIR Pp. 15. Illustrated-photographs. Cleveland: United Laboratories, Inc. Free.

THIS helpful brochure has been prepared specifically to help schoolmen with the care and preservation of their stadiums.

While every stadium will require final and individual recommendations, the enclosed information will serve to describe the general problems and conditions basic with most such structures.

The repair methods described and pictured are actual results; they are not theoretical.

A free copy of this brochure may be obtained by writing to the United Laboratories, Inc., 16801 Euclid Ave., Cleveland 12, Ohio.

# 1948 OFFICIAL GUIDES

VAILABLE now for immediate de-A livery are the following official guides and rules books:

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4. Official NCAA Lacrosse Guide,

All these books contain the official rules, team pictures, interesting articles, and vital statistics.

Order direct from A. S. Barnes & Co., 67 West 44 St., New York 18, N. Y.

# **Tennis Training**

(Continued from page 10)

he can catch it from bounce with right hand, then repeat to left hand.

Game for scoring and strategy

Chalk up as many courts as possible—4 x 8 ft. with 4 ft. allowance on all sides. A 32 by 60 gym should accommodate 28 students with two playing on each court.

Have the players use their hands as rackets and teach them to bounce the ball on the service and to hit the ball into the opponent's service course.

Observe the regular tennis rules. The players may use either hand in returning the ball, but may not use both hands.

# Benefits of game

1. Scoring rules and strategy are learned through actual experience.

2. Boy is taught to watch the ball, to anticipate where the opponent will return it, judge the bounce of the ball, judge distance, etc.

3. The teacher has an excellent opportunity to impart all the fine courtesies of tennis.

4. Tournaments may be drawn up and students shown the methods used in preparing a draw and how a draw actually functions.

# SECONDARY SCHOOL PROGRAM

Each gymnasium presents a problem when organizing the classwork for tennis instruction. The instructor will have to use his ingenuity in making adjustments to fit the work to the size and type of gymnasium.

Allow each pupil a space of eight feet, in front, to the sides and to the rear. On a court 50 x 90 you can comfortably arrange 40 pupils and, in a pinch, 50 pupils.

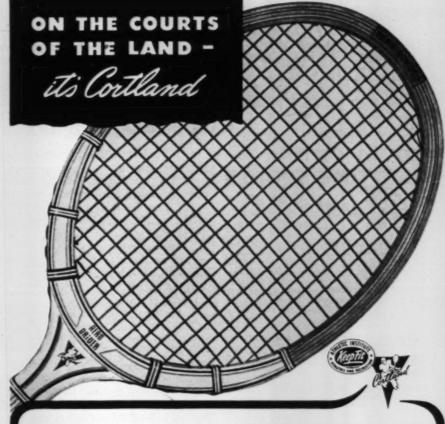
Mark the surface before the class arrives. Step off three average steps and mark with a cross or circle. When the class is called to order, all that is necessary is to direct the pupils to stand on the crosses.

## Pre-test (for all beginners)

- 1. Bounce ball from racket to floor 100 times in succession.
- 2. Alternate hitting 5 up and 5 down 100 times in succession.
- 3. Pick up ball from ground with

Progressive steps in teaching fundamentals

- 1. Show forehand and backhand grips. (Have pupils gather around instructor.)
  - 2. Return pupils to their places



# FREE!

"Tennis Tactics" — This handy, indexed and illustrated pocket-size booklet has been acclaimed by tennis coaches and physical education directors. Used in American Lawn Tennis Teaching Material Sets. Reasonable quantities free for use in tennis instruction and stimulation of player interest. Write today.



School tennis, too, calls for Cortland rackets. The old "any racket will do" days of school tennis are over. Coaches and Directors of school athletics stress the importance of good equipment — not only for competitive play, but also for intra-mural and personal enjoyment of tennis.

Cortland RESIN-BONDED frames are particularly made for school tennis — the special RESIN-Bonded process welds the multi-ply hardwood laminations into a sealed bond that makes an exceptional all-weather, all-court tennis racket. Ask your equipment supplier about prices and deliveries of Cortland rackets. You will want to have the best buy for your school . . . so don't overlook Cortland RESIN-BONDED rackets.

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**DEPT. 102** 

ROCK ISLAND, ILL.

and practice preliminary work using the proper grips.

3. Starting position.

4. Face pupils sidewards, practice forehand swing, and backhand swing.

5. Footwork combined with racket swing (forehand).

(a) Footwork involving one step and swing. (Ball to right and forward.)

(b) Footwork involving one step, skip and swing.

c) Footwork involving more than one step, skip and swing.

(d) Footwork involving one step (right foot) backward and swing.

(e) Footwork involving one step, skip backward and swing.

(f) Footwork involving more than one step, skip backward and swing.

(g) Footwork for a ball coming directly at you.

6. Footwork for backhand. Same as for forehand except start with right foot and go for a ball to the left and in front.

7. Divide pupils in groups of three for hitting practice. Demonstrate with one group the proper technique. 1—HITTING, 2—BOUNCING the ball, 3-RETRIEVING the ball. Use bench, if one available. Demonstrate the feeding method. Feeder tossing ball from in front.

8. Demonstrate and practice serv-

(a) Proper stance.

(b) Swing for plain slice service.

(c) Tossing the ball.

9. Hitting the service. If space is available, arrange class in as many lines as possible at one end of court. One line at a time to hit service.

This simple, effective training program was designed by three public-spirited Chicago agencies, and is being distributed in booklet form through the courtesy of Wilson Sporting Goods Co.

# **Student Sports Conference**

S CHOOLS throughout the country are invited to send their intramural directors and sports managers to the First Annual Student Sports Conference at the U. of Illinois on May 7-8.

Planned by Hartley Price, director of intramural and recreational sports at the University, the Conference will furnish an excellent opportunity for an interchange of ideas, both of theory and practice, among people connected with intramurals at widely separated schools. The student managers will conduct the symposium, while the intramural directors will serve as summarizers.

For further information and reservation blanks, write to Mr. Hartley Price, IMREC Office, 205 Huff Gym, Champaign, Ill.





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BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY



# A Model Physical Ed Program

By LEN RICHARDSON

HIS physical education study was undertaken with several objectives in mind, namely: (1) to discover relationships of measurements in anatomy, mental ability and athletic achievement as measured by the coach; (2) to arrive at a method of grouping boys for equal competition; (3) to form objective method of physical education grading; (4) to establish anatomical norms for remedial P.E.; and (5) to provide aids for coaching the major sports.

Kessler Junior High School was employed as a laboratory, and 354 students were used as subjects.

The data on the boys consisted of age, weight, height, 11 anatomical measurements, three mental scores, and recordings of 17 athletic events.

The athletic events were the 50yard dash, 100-yard dash, 440-yard run, cross-country run, high jump, standing and running broad jumps, shot-put, baseball throw for accuracy and distance, football throw, push-ups, hand stand, rope climb, foul shooting, rapid shooting, and swimming.

After a reasonable practice period and the perfection of conditions to enable the boy to make his best mark, recordings were taken in each event. Measurements were also taken of neck, reach, chest and chest expansion, waist, calf, visual acuity, body length, and leg length.

The necessary athletic index was

devised by the writer.

Once these data were massed, a statistical approach was used to bring out certain relationships. Many interesting findings were discovered as by-products of the main study, such as: the scores of the remedial group, correlations, and proof of the left eye being weaker than the right.

# METHOD OF ATTACK

The method of attack was investigation of present research, fact compilation, and the application of the facts. Split-second timing (tenth of seconds) was used in the dashes, 60-foot swim, rope climb, and hand stand, while the closest second was adequate in the 440 and cross-country runs.

Basketball skills were measured by recording the number of successful free throws out of ten and the number of shots put in within 30

Using the Snellen Chart and starting from "superior" and ending with "very poor," each eye was graded from 1 to 10. Mental ability scores were taken by the school psychologist who used group (Kuhlmann-Anderson) and individual (Stanford-Binet) intelligence tests.

#### ATHLETIC INTEREST TEST

Coaching experience has taught the writer that athletic interest makes for athletic success. Therefore, he set out to find a measuring device for this factor.

After an exhaustive hunt through catalogues, listings of interest tests, and checking with the Portland Psychometric Laboratory, Science Research, and Stanford University, he found no such test.

A thorough canvass was then made of several interest tests to pattern one for this study. To avoid priming, this test was given as an interest survey in social studies with half of the questions being relavant. Few made the highest score of 77, representing extreme interest, but other results were surpris-

# **Sample Questions**

1. Would you rather: (1) make a touchdown for your school in an important game, (2) be elected student-body president, (3) have a straight "A" report card, or (4) be a soloist in

a concert.

2. Our student-body president is:
(1) Bruce Holmes, (2) Harris Lamphear, (3) Arlen Kavanaugh, (4) Jim

3. Do you: (1) go "all-out" for foot-ball or basketball and like these sports well enough to skip a meal to play a game, (2) enjoy the game but can't get real serious about it, (3) take it or leave it as it comes, (4)

have no special thrill for the sports.

4. The atomic bombs fell upon Japan in: (1) June, (2) July, (3) August, (4) September.

5. Among the activities of the school, which do you prefer most: (1) clubs, (2) football, (3) band or glee

club, (4) basketball, (5) dancing and social hours.

6. The only member of the original "Big Three" in office today is: (1) Truman, (2) Attlee, (3) Churchill,

(4) Stalin.
7. How many football games did you attend when Kessler and the High School played: (1) every home game and some away, (2) 5 games but less than 8, (3) less than 5 games and

less than 8, (3) less than 5 games and more than 1 game, (4) no games.

8. In World War II there were a series of important "Days." They occurred in this order: (1) V-J, D, V-E; (2) D, V-J, V-E; (3) D, V-E, V-J; (4) V-E, D, V-J.

9. In your opinion who do you think most popular about school: (1) Kessler's leading football scorer, (2) the smartest "kid" in school, (3) the yell queen, (4) the "top" musician in the band.

10. The highest ranking war hero to visit Longview in 1945 was: (1) General Eisenhower, (2) Admiral Nimitz, (3) General Wainwright, (4) General MacArthur.

11. How do you spend most of your spare time out of school: (1) practicing some athletic like football or base-ball, (2) going to shows, (3) working on your hobby, (4) reading, studying

or playing non-athletic games.

12. On Navy Day there were docked at the Port of Longview: (1) two battleships, five submarines, (2) one submarine and two destroyers, (3) three aircraft carriers, (4) two aircraft car-

### SCHOLASTIC RATING

Kessler, with its lack of emphasis on scholastic standards for athletic participation, was ideal for making a comparison of athletic and scholastic achievement. Hence, scholastic ratings were added to the recordings.

The boys were rated from 5 to 1, with "5" representing the conventional A, "4" for B, "3" for C, "2" for D, and "1" for F or X. The grade was determined by the homeroom teacher.

# THE ATHLETIC EVENTS

The athletic recordings attempted to measure strength, agility, endurance, speed, accuracy, and skill.

A word should be said about the baseball throw for accuracy, which consisted of throwing the ball five times at a specified target. The target was set at a distance of 50 feet. with a bull's-eye radius of six



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inches. Two concentric rings circled the bull's-eye with additional radii of six inches. The score from inside to out was 25, 10, 5, and 0, which gave the individual his tally (total of five tries).

Let's say that "A" hits the bull'seye with one throw, the inner circle with two, the outer circle with one, and misses the target with the other. What will be his score? It will be the sum of 1(25), 2(10), 1(5), 1(0), or 50.

The cross-country race was approximately a half mile by the most direct route, and consisted of a course around the west end of Lake Sacajawea in Longview.

In measuring the hand-stand, the time was taken from the moment the boy's feet left the floor until they hit the floor once more.

Since few could climb the rope in the hand-over-hand method, the boys were allowed the use of their feet for this 18-foot boost.

As for the other events, standard procedures were followed to the letter.

### ANATOMICAL MEASUREMENTS

For a clear understanding of several of the items, some explanation is essential as to the various anatomical measurements.

Age was given in years, weight in pounds, and height in inches.

Chest expansion was measured as the difference in circumference of the normal chest and the chest expanded.

In measuring the shoulder, the writer used the distance between the outside shoulder tips, while arm reach was the distance from the shoulder to the most distant point of the longest finger.

The circumference about the neck was used for the neck measurement, with the seventh cervical vertebrae (large sharp bone of neck) as the upper point.

The body length was measured to the coccyx (tail bone), and from this point to the heel gave the leg length. The calf was taken as the largest circumference of the leg below the knee.

### PHYSICAL EDUCATION INCENTIVES

To capitalize on incentives, the writer established an athletic honorary fraternity for Kessler boys. Patterned after the National Athletic Fraternity, the Sigma Delta Psi, the writer set the requirements given below, the marks of which were chosen from the eighth-grade decile points (the upper 20%) and were modified by a table prepared by Dr. John Brown, Jr.

Brown's standards were classified by weight groups of his Y.M.C.A. boys. The average eighth-grade weight was used in this study for the purpose of comparison.

As in the college honorary society, an athletic letter may be substituted for one of the requirements. The events below are open for pupils from the sixth through the eighth grades and may be checked off any time when the boys equal or better the marks set down.

The other requisite for membership is the completion of the tests on or before three days before the general awards assembly.

# Kessler Sigma Delta Psi

(Requirements for Membership)

1.	50-Yard Dash	6.8 sec.
	100-Yard Dash	
	Running High Jump	
4.	Running Broad Jump	12'6"
	8-Pound Shot	
	Throwing Baseball	
	Cross-Country	
	Hand-Stand	
	Rope Climb	
	60-Foot Swim	

Grades are probably one of the most powerful incentives in any phase of school work, and as a result of this study the writer has decided upon making use of this form of motivation.

The events were graded as shown in the table above.

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Grade	Distribution of Cases	Grading Standards (50-Yard Run)	Final Grade (Eighth Grade)
A	Upper 5% Next 20% Mid 50% Next 20%	6.1-5.8 6.8-6.1 7.6-6.8 8.5-7.6	8.21-9.46 7.78-8.21 5.02-7.78 3.11-5.02 2.5 -3.1
	A	Grade         of Cases           A         Upper 5%           B         Next 20%           C         Mid 50%           D         Next 20%	Grade         of Cases         (50-Yard Run)           A         Upper 5%         6.1-5.8           B         Next 20%         6.8-6.1           C         Mid 50%         7.6-6.8           D         Next 20%         8.5-7.6

This specific table breaks up the 50-yard run into the various grade-letters according to the times indicated. All 17 events were standardized in this manner so that they could be posted for student use.

Knowing the grade levels, the pupil could apply the self-grading system to his marks and thereby strive for improvement.

The final grade was indicated by a comprehensive index embracing the many factors of physical education. Besides the scores of the 17 events, this broad index included an objective measurement of posture, care of lockers, bathing habits, appearance (hair, shoes, clothing), and citizenship (sportsmanship, willingness to cooperate, respect for equipment).

All factors were scored from 1 to 10, and the mean average was determined to the second decimal for ranking purposes.

Grading the intangibles presented a problem in bookkeeping until a definite system was hit For example, when the time came to grade the "housekeeping of lockers," an unannounced locker inspection was called. The boys opened their storage chambers and received a grade from 1 to 10 which indicated the condition of their lockers.

Another day, "bathing habits," were observed and likewise recorded, then "appearance," and "citizenship" followed at various intervals.

It was found that to attempt to grade all four factors on one day took too much time and, thereby, was impractical. The best solution, the writer found, was to grade one item per week.

This is the first of a series of two articles on the components of a physical education program, as developed at Kessler Junior High School, Longview, Wash., by Len Richardson, who has been teaching in the school field since 1939. A four-sport man at college, Richardson coached at three Northwest high schools before entering junior high work at Longview. He currently is director of intramurals at Lincoln High School, Portland, Ore.









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# Judo the Gentle Way

(Continued from page 57)

gerous tactics of jiu jitsu, provided the instructor is satisfied that the student possesses self-control, good judgment and high moral standards, so that there is no danger of these tricks being used in rage or for criminal purposes.

The student is required to promise not to show these tricks to those not of equal standing and not to use them in competition or practice against such opponents. Where the old traditions are kept intact, the skills are taught only at night, with no one possessing a lower rating permitted to be present.

The exercise hall in which the judo students train is known as a dojo. The word "dojo" was originally applied to Buddhist monasteries and the exercise hall is required to be kept clean, plain and quiet, in keeping with the ascetic tradition.

In prewar Southern California, at least, they were anything but elaborate. The biggest school in Los Angeles was in an old frame house. The Orange County Judo Club, which had the best team in Southern California, was housed in a wooden structure originally erected as a place in which to dry chili peppers.

The dressing room was small and bare—the only furniture consisted of a few benches and some nails driven in the wall to act as clothes hooks. In one corner stood the "shower." This consisted of a galvanized iron tub roughly three cubic feet in size erected on a foundation of bricks.

Under the tub a wood fire burned, keeping the temperature of the water uncomfortably high. In the tub floated a wooden grating. After working out the athlete simply stepped on this grating and washed off right in the tub.

The exercise hall itself had a built-in mat covering the entire floor from wall to wall. On top was a taut convas cover; on bottom, it was said, was a wool base. It was somewhat softer than our usual type mat but very springy. The only object in the room was a picture of Professor Kano, which hung on a wall. In honor of his having devised the sport which they were about to enjoy, all students were required to bow to it immediately upon crossing the threshold.

To the non-Japanese, one of the most interesting features was the range of ages of the participants. Many boys from about four years of age upwards would be practicing with great diligence, and a few

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elderly men were usually enjoying a quiet workout. Others would be squatting along the walls, watching their children and grandchildren with experienced eyes.

One of the most serious indictments which can be levelled against our own sports is that this extended period of interest and actual participation is so seldom found. Here at least we have much to learn from our American-Japanese friends.

Judo practice is divided into two phases.

Kata consists of formal exercises in prearranged attacks and defenses. It is at this time that instruction in hitting, kicking and other dangerous methods is given. It is always started and ended with an exchange of formal bows in which both the knees and the palms touch the mat.

Randori is free exercise; that is, actual practice for competition. The salutations are usually simplified to a simple bow of the head.

### THREE GENERAL SKILLS

Judo is divided into three general techniques:

- 1. Nage-waza, The Art of Throw-ing.
- 2. Katame-waza, The Art of Holding Down.

3. Ate-waza, The Art of Striking. Space will not permit discussion of these techniques here, but details may be found in any one of a number of books, the best being Modern Judo, by Charles Yerkow.<sup>2</sup> Also any one interested in this sport should not fail to read Professor Kano's booklet, Judo, No. 16 in the Tourist Library published by the Japanese Government Railways. Occasional copies may still be found in stores specializing in Oriental material.

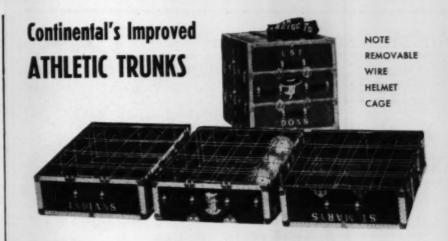
In competition a bout consists of one point (ipon), which may be scored in any of the following ways, although the last two are reserved to those possessing black belts:

- 1. Throwing opponent flat on his back on the mat.
- 2. Holding opponent down in one of certain approved forms for 30 seconds.
- 3. Choking opponent until he either becomes unconscious or signifies defeat by patting the mat.
- 4. Torture holds, causing an opponent to give up.
- 5. Hitting opponent in a vulnerable spot.

Throws which are executed with something less than perfection, hold-downs for a period of less than 30 seconds, etc., may be

<sup>2</sup> The Military Service Publishing Co., Harrisburg, Pa., 1943 (\$3).

0





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awarded half a point (wazaari). Two of these will win a match. It will be noted that strangling is legal; strangely enough scissors holds on the head or body are for-

Methods of team competition differ markedly from our own. The two teams sit on opposite sides of the mat, facing each other and arranged in order of skill so that the best man is at the head of the line and the poorest at the bottom. The opposing wrestlers at the bottom of the line make the first bout.

The winner immediately takes on the next wrestler in the opponents' line-up. When he himself is finally defeated, the second man on his own team takes his place. Individual standings are decided by the number of points scored by each competitor.

The competitors stand perfectly erect. Bending over at the waist or crouching to protect the legs from attack, as in wrestling, is considered to indicate that one fears his opponent and dares not let him have the opportunity to make an attack. Obviously, no such loss of face can be tolerated.

It will be noted that there is no such thing as a division by weight classifications. A 90-pound weakling may find himself pitted against an opponent twice his size.

While this may seem odd to a Westerner, it is perfectly consistent with the philosophy of the art. Actually if a contestant is going to win by giving way and employing an opponent's strength to defeat him. greater size and weight simply represents an opportunity for a more efficient and decisive victory.

One cannot choose his opponents in a brawl. To be prepared for any emergency that might arise, one must be confident of his own ability to handle antagonists of any size

This explains the instructors' continual insistence on correct technique. Each throw must be executed so perfectly that the one thrown will realize the inexorable logic of his downfall.

Philip J. Rasch will be remembered as the co-author of the excellent series of weight-training articles which appeared in the December and February issues. He is a Corrective Therapist at Brentwood Hospital (Calif.).

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MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.	11 52 70 62 44 41 22 61 68 57 66 31 29 38
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA STATE COLLEGE.  PETFERSEN & COMPANY.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY.  DHADMA CRAFT CORPORATION.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE.  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PILITMAM'S G. P. SONS.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REMINGTON ARMS COMPANY, INC.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 3 45
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REVERE FEIECTRIC COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REVERE FEIECTRIC COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REMINGTON ARMS COMPANY  REVERE FEIECTRIC COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE.  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  3rd C.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 43 44 41 41 41 41 41 41 41 41 41 41 41 41
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REGALIA MANUFACTURING COMPANY.  REGALIA MANUFACTURING COMPANY.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  3rd C.  DR. SHIFFER'S LABORATORIES, INC.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62 45 62 27
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY  3rd C  DR. SHIFFER'S LABORATORIES, INC.  SIX-MAN FOOTBALL MAGAZINE	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62 27 70 28
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REGALIA MANUFACTURING COMPANY  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY  STACK  SIX-MAN FOOTBALL MAGAZINE  SOLVAY SALES DIVISION, ALLIED CHEMI-	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62 27 27 27 27 27
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  3rd C.  DR. SHIFFER'S LABORATORIES, INC.  SIX-MAN FOOTBALL MAGAZINE.  SOLVAY SALES DIVISION, ALLIED CHEMICAL	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 45 62 45 62 45 70 27 27
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  3rd C.  DR. SHIFFER'S LABORATORIES, INC.  SIX-MAN FOOTBALL MAGAZINE.  SOLVAY SALES DIVISION, ALLIED CHEMICAL	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 45 62 45 62 45 70 70 70 70 70 70 70 70 70 70 70 70 70
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  3rd C.  DR. SHIFFER'S LABORATORIES, INC.  SIX-MAN FOOTBALL MAGAZINE.  SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORP.  SPALDING, A. G., & BROS.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 45 62 45 62 45 70 70 70 70 70 70 70 70 70 70 70 70 70
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REGALIA MANUFACTURING COMPANY.  REGALIA MANUFACTURING COMPANY.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  STEWART SALES DIVISION, ALLIED CHEMICAL & DYE CORP.  SPALDING, A. G., & BROS.  STEWART IRON WORKS.	11 52 70 62 44 41 22 61 68 31 29 38 57 56 65 34 3 62 27 70 48 1 18
MDEGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY  NATIONAL SPORTS EQUIPMENT COMPANY  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS  PENNSYLVANIA STATE COLLEGE  PETERSEN & COMPANY  PHARMA CRAFT CORPORATION  PROFESSIONAL APPLIANCE COMPANY  PUTNAM'S, G. P., SONS  RAWLINGS MANUFACTURING COMPANY  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY  RIDDELL, JOHN T., INC.  SIX-MAN FOOTBALL MAGAZINE  SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORP.  SPALDING, A. G., & BROS.  STEWART IRON WORKS.  UNIVERSAL BLEACHER COMPANY	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 3 62 27 27 27 28 27 27 27 28 27 27 28 27 27 28 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE.  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  SEAMLESS RUBBER COMPANY.  SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORP.  SPALDING, A. G., & BROS.  STEWART IRON WORKS.  UNIVERSITY OF CONNECTICUT.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 857 56 65 45 62 45 62 45 70 27 28 70 27 28 70 27 28 70 28 70 70 70 70 70 70 70 70 70 70 70 70 70
MacGREGOR GOLDSMITH, INC.  McLAUGHLIN-MILLARD, INC.  MAGES SPORTS DISTRIBUTORS, INC.  MARBA SYSTEM.  MEDART, FRED, PRODUCTS, INC.  MISHAWAKA RUBBER & WOOLEN MFG. CO.  MUTUAL LIFE INSURANCE CO. OF N. Y.  NADEN ELECTRIC SCOREBOARD COMPANY.  NATIONAL SPORTS EQUIPMENT COMPANY.  NISSEN TRAMPOLINE, THE  OCEAN POOL SUPPLY COMPANY.  OHIO-KENTUCKY MANUFACTURING CO.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA ATHLETIC GOODS.  PENNSYLVANIA STATE COLLEGE.  PETERSEN & COMPANY.  PHARMA CRAFT CORPORATION.  PROFESSIONAL APPLIANCE COMPANY.  PUTNAM'S, G. P., SONS.  RAWLINGS MANUFACTURING COMPANY.  REMINGTON ARMS COMPANY, INC.  REVERE ELECTRIC COMPANY.  RIDDELL, JOHN T., INC.  SEAMLESS RUBBER COMPANY.  SEAMLESS RUBBER COMPANY.  SAMLESS RUBBER COMPANY.  SAMLESS RUBBER COMPANY.  SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORP.  SPALDING, A. G., & BROS.  STEWART IRON WORKS.  UNIVERSITY OF CONNECTICUT.  UNIVERSITY OF CONNECTICUT.  UNIVERSITY OF CONNECTICUT.	11 52 70 62 44 41 22 61 68 57 66 31 29 38 57 56 65 34 45 62 45 62 45 62 47 70 70 70 70 70 70 70 70 70 70 70 70 70
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